

Indigenous Views of Heart Health & Disease: A Medical-Anthropological Study

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Abstract: Cardiovascular diseases are strongly linked to adverse lifestyle behaviors, psychosocial stress, and some mental disorders associated with modern Westernized societies. These diseases are accompanied by obesity, diabetes, and cancer in developing societies and among indigenous peoples “transitioning” into modern urban centers. This chapter explores pathogenic cultural influences which engender psychosocial dysfunction (e.g., chronic stress, constant time pressure, anxiety, depression, hopelessness) and increase cardiovascular disease and coronary artery disease risk factors (e.g., inactivity, unhealthy diet, tobacco use). Because overt signs of cardiovascular disease show up late—in advanced stages—and since research indicates that such degenerative disease first begins developing in adolescence, comprehensive prevention programs aimed at children and implemented at the national level are strongly advocated by the World Health Organization. To implement such programs at the national level is to engage in cultural change: therefore solid prevention planning can benefit from medical-anthropological and critical ethnographic investigation into the role of culture-syntonic (i.e., what seems normal but is pathogenic) influence on disease process in modern Western societies, bringing them into more explicit awareness and thereby rendering them culture-dystonic (i.e., perceived as pathogenic and needing to be changed).

INTRODUCTION AND PLAN

Medical anthropology is a multidisciplinary field examining the relationships between culture and healthcare systems, and the way disease is engendered, shaped, managed, diagnosed, and treated within a given society. This chapter will briefly review recent epidemiological data on cardiovascular disease in context with other non communicable diseases associated with modern Westernized societies (including “developing societies”), and then review the call for nationwide cardiovascular disease (CVD) prevention programs in light of recent research into the relationship between psychosocial factors in the pathogenesis of coronary artery disease (CAD). This will be followed by an ethnographic description of the conception of heart, health, and sickness in several indigenous societies in the Americas, in contrast to the biomedical understanding of the cardiac organ and in contrast to biomedical assumptions about the heart. The intention is to take a closer look at culture-syntonic sources of psychosocial stress within Western societies by looking at modern Western culture from an indigenous perspective. This ethnographic exposition will be followed by a “cultural diagnostic” involving four indigenous American healers from North, Central and South America who attempt to assess what they see as central pathogenic signs and factors within modern Western society, and in particular in the United States. The heart-based, instinctual- intuitive way of life of these indigenous peoples comes up against the modern Western way of life that has a number of features that are now found to be pathogenic psychosocial factors in cardiovascular disease. Finally we shall examine some of the cultural sectors where “risk factors” are identified: diet, exercise, and psychosocial factors making comparisons of indigenous diet and correlate physical activity levels, and reviewing the biomedical data on these indigenous (and hunter-gatherer) peoples.

BIOMEDICAL CONTEXT OF CARDIOVASCULAR DISEASE & CULTURE

The rapidly increasing burden of non-communicable diseases such as CVD and CAD, cancer, diabetes, and obesity associated with the spread and development of modern Westernized societies is well documented by

the World Health Organization (WHO). By 1999 60% of deaths in the world and 43% of the global burden of disease was accounted for by noncommunicable diseases. Of these, approximately half, 30%, are attributed to cardiovascular disease (CVD). The WHO projects that by 2020 the death rates will rise to 73% and the burden of disease to 60% (1). Most Western countries face high and increasing rates of CVD, and each year heart disease kills more people in the USA than cancer. While in the USA and many European countries rates of death from CVD are still very high, there have been slightly declining deaths presumed as due to educational prevention programs and pharmacological and surgical methods of treatment: but the rates of death by CVD disease are sky rocketing in previously non-Westernized societies which are now considered “developing” (1, 2).

In China and India the burden of CVD is greater than in industrialized countries as a whole (1). Indigenous non-western peoples from around the world rapidly begin showing a rise in these non-communicable diseases once they enter the major urban centers and begin adopting Westernized life styles. Studies of enculturation and epidemiology in the USA show that Japanese immigrants who resist enculturation also resist these diseases, but those Japanese immigrants who thoroughly acculturate themselves develop the same rates of these noncommunicable diseases as the rest of the population (3). This is evidence that there are cultural influences engendering life-style related risk factors.

An American Heart Association report by Rozanski, Blumenthal and Kaplan (4) in which 279 recent studies are reviewed, concludes there is clear and very convincing evidence that psychosocial factors contribute to the pathogenesis of CAD and cite evidence from 5 domains: 1) Depression, with its related symptoms of demoralized feelings, hopelessness, despair, discouragement, 2) Anxiety, with its associated hyperactive sympathetic nervous activity, and associated chronic and acute forms, 3) Personality Factors and Character Traits, citing Type A behavior with its time pressure, exaggerated commitment to work, aggressiveness, and particularly lethal risk factor: hostility involving anger, cynicism, and mistrust; 4) Social Isolation; and 5) Chronic Life Stress. Mechanisms underlying these relationships manifest either through modifiable risk behaviors such as poor diet, tobacco use, inactivity; or through direct pathophysiological mechanisms, such as platelet activation and neuroendocrine surges.

Extensive animal-model research (primate) establishes that chronic psychosocial stress leads to transient endothelial dysfunction and even necrosis associated with excessive sympathetic nervous system (SNS) activity, and exacerbation of coronary atherosclerosis. Animal model research (primate) also shows that psychosocial stress induces hypercortisolemia, excessive SNS adrenergic activation, and ovarian dysfunction in premenopausal women (5). In animal models acute stress has been shown to increase a variety of physiological abnormalities including increases in platelet over-activity(6), and increases in blood viscosity through hemoconcentration, leading to vasoconstriction. (6) These studies suggest the strong pathogenic influence of acute and chronic stress.

Chronic hopelessness (including deep sadness and discouragement) has been linked to sudden cardiac death in observational and animal studies of males, and the experience of hopelessness has more than doubled the risk for CAD in men (7). Anxiety, including panic reactions, has been linked to sudden cardiac death, but not to myocardial infarction (8).

The WHO proposes that because CVD begins early in life, prevention must begin early. The prevention proposal of the WHO cites the well known evidence that the major causal risk factors for CVD are also the same for other diseases associated with modern Western societies (diabetes type 2, obesity, osteoporosis, and cancer). The major three areas targeted are unhealthy diet, tobacco use, and insufficient physical activity. The Executive Board of the WHO documents the example of North Karelia, Finland, where the mortality rate of the 34-64 year old population was reduced by 73% over 25 years during a community based and national program (1). It was concluded that more than half this decline could be accounted for in terms of dietary changes in the population (1). Such studies are encouraging in showing that national programs of prevention can work. However, the WHO proposal for prevention does not address the culture-syntonic influences on

lifestyles and behaviors that engender CVD risk and other non-communicable diseases in the first place. According to Rozanski, et.al.(4), psychosocial factors engendering unhealthy risk factors must be addressed . Programs to eat right, stop smoking, and get sufficient exercise do not address the cultural influences in society that are giving rise to psychosocial pathologies and the closely related dangerous life-style choices. To open up research and inquiry into the role of culture in the formation of psychosocial risk behavior and CVD, leverage is needed to examine our own culture and assumptive world from without and thereby render unseen pathogenic influences as culture-dystonic. Only when seen culture-dystonically (i.e. as pathogenic rather than as normal) can prevention strategies to change those pathogenic influences become possible.

By “culture,” in this study, we shall mean a system of symbols and norms that structure and guide the life of a society and its individual members, providing general images of the nature of life, and ideals of how it should be lived (including norms for dietary, social and hygienic behavior). From within the purview of medical anthropology, we add that each culture has an assumptive world not entirely conscious, shared by each member of the society, and that each culture has a way of establishing notions of health and sickness, and culture-specific modes of diagnosis and treatment rooted partly in natural observation, and partly in traditional norms, symbols, and values (9, 10). Health care systems are rooted in the history of a people, its religions, rites, philosophies, and laws. Explanatory Models, (EMs) for diagnosing sickness and illness are shaped out of these cultural resources. (9,10). One justification for anthropological and medical anthropological understanding is not to just enlarge the fields of human discourse, but to increase research into preventive and prevention program development via investigation into the cultural roots and shaping of illness and its care and possible prevention.

INDIGENOUS AMERICAN CONCEPTION OF THE HEART AND HEALTH

The indigenous peoples of North, Central, and South America include a multitude of tribes or nations, and these are part of a number of cultures and cultural systems that are quite diverse. It is difficult to specify shared beliefs and practices that apply to all or most of them. However, across cultural and linguistic boundaries there are certain shared assumptions and outlooks, particularly when it comes the nature of the human heart and the related conceptions of health and sickness.

The Indigenous Americans hold to a shared set of assumptions concerning the heart that has always included psychological functioning, in healthful and unhealthful forms. By “indigenous peoples” we mean a society and the culture of peoples native to a specific geography, such as the Alaskan Inuit, the Southwestern Pueblo, the Quechua (Kichwa) people of the high Andes in Ecuador. In their indigenous way of life, prior to any Western influence, they have lived in terms of the symbolic, normative, and spiritual traditions of their culture, generally in ways that are in instinctual and intuitive resonance with the surrounding landscapes on which they depend.

The conception of the heart in these cultures is two-fold. On the one hand there is recognition of the cardiac pumper at the center of the enclosed circulatory system. This physical center is seen as vital to the life of the body, and is taken up metaphorically in the mythologies and rites of some indigenous peoples, such that the “Great Spirit” which is the source and dwells in the center of every creature in the cosmos (11). Metaphorically, this cardiac pumper is sometimes referred to as the “heart drum”, beating out the pulse of Earth Mother in all her creatures, human and non-human. A metaphor for happiness was considered a strong beating heart in Ojibway culture. However, this metaphoric understanding transfers meaning from the physiological cardiac pumper to a second kind of central core, which is understood without any mind-body dualism. This second kind of heart is experienced as present in the middle of the chest, and is closely related to the physical pumper. This “core of aliveness” carries much of the sense of the “psyche” in Western psychological idiom, but also the sense of it being the vital core of psychological life; a deep center of motivating energy, action and behavior.

As a core of aliveness, a healthy heart is one which is open, unguarded, and filled with vitality and spirit. This heart has powers of feeling and “perception”, but it is not simply an emotional feeler. Although it includes emotions, it is viewed as possessing sentient, instinctual, and intuitive intelligence and percipience. To “know with the heart” is to know bodily, instinctually and intuitively and to feel that knowing concretely in the center of one’s chest. This system contrasts with the psychological powers of the mind, which is viewed as the “thinker” that analyzes, plans, likes to solve problems, develop strategy, and so on. The mind is viewed as one kind of intelligence whose nourishing ground is the heart: a holistic, sentient, and instinctive intelligence of the body and of natural organisms.

The “intelligence of the heart” is considered more holistic and natural –an intelligence which in its operation is similar to the way roots know how to find a water source, and the way leaves know how to reach for and find sun light. In the indigenous view of the Americas, the heart, the “core of aliveness,” is concerned with the quality, satisfaction, and purpose of one’s life. In this cultural system, the direction for one’s life cannot come from the mind, but must come from the heart. Once one has a vision and purpose for one’s life clarified, through a rite of passage such as the Vision Quest, for example, the mind can help one figure out how to turn it into reality, remove obstacles, and so on. The mind is thus viewed as a partner of the heart --but to be in balance, the mind must become “servant” of the heart.

The normative life in indigenous American cultures, its ideal person, is one who lives from the heart, and the practice of doing so is often called the “path of the heart”, and it is supported by the sacred traditions of the culture, and community. To live from the heart is to live vitally and freshly, open to the natural world and in tune with its cycles and seasons, in reciprocity with and care for the surrounding landscape and its variety of life forms. To live from the heart is to become a strong and individuated participant in the life of the community. Reciprocity is an ethical norm inculcating respect and care for “all my relations,” known in the Lakotah language “Mitakuye oyasin”. “All my relations” includes the mineral, plant, and animal peoples. “Peoples” is a term that gives equal dignity to other life forms, in the indigenous paradigm of the Lakota people.

From an early age, each person is encouraged to discover and get to know his or her own heart, and to use it for guiding their steps in living. The heart, as core of aliveness, comes equipped with its own natural and internal guidance system, or IGS. Attending inwardly in the middle of one’s body --sometimes called “listening to the heart drum”-- one can notice visceral-instinctual stirrings, felt-sensings that in effect draw one toward or repel one away from something, for example, from some person, object, or course of action. In this way one considers any course of action, any life choice from the vantage point of the heart’s IGS. By trusting the instinctual wisdom of the IGS a person is enabled to walk a life-path that is naturally satisfying, even joyful.

A good path or life-course is considered any path in love, in work, and in service that “makes your heart beat strong” (12). The health of a person is determined by indigenous healers of the Americas in terms of how well the individual is connected to and living from his or her own heart. Living from the heart, letting oneself live the life one’s heart naturally draws one toward is considered “good medicine” in a cultural system that has a vastly expanded sense of “medicine” that makes for wellness. Anything that results in happiness, joy, or a sense of well being is considered “good medicine,” and anything that results in unhappiness, continual stress, hopelessness, or selfishness is considered “bad medicine.”

To not be able to live from one’s heart is cause for great concern, as it can engender many forms of sickness and lead to death. The extensive ethnographic work on indigenous psychology by Hultkrantz documents widespread concepts correlating the heart and vital spirit or soul, and even locating them in the heart or identifying them as the heart amongst such native American cultures as the Cherokee, Paiute, Walapai, Tepehuano, the Naskapi of Labrador, Ute, and Pueblo peoples of the southwest (13). The individual’s

everyday biological and social existence is believed to be powered by and given quality through a vital spirit or inner soul or psyche. An individual is considered vital, spirit-full or soul-full when he or she is connected to and living from the heart.

Through a variety of forms of physical or emotional trauma or shock it is believed this inner “vital soul” or “free soul” can leave the person (13, 14). In such cases biological and even social life goes on, but the person’s vitality is lacking. To translate this across cultures and into our modern cultural idiom, this condition is like the person whose spirit is broken, who *raison d’être* is lost, who feels dead inside, who goes about the business of living, but without any real vigor or fire within. In short it is a condition that might be variously described, depending on the actual symptoms, as dysthymia, depression, dissociation, anxiety, or chronic grief, despair, hopelessness, or anomic mourning.

It is worth noting, here, that the cardiac pumper and the heart as core of aliveness are very intimately related in the indigenous American conception. Emotionally or psychologically devastating events caused by traumatic accidents such as the death of a loved one, love-sickness (broken heart), amongst other psychosocial traumata, are widely believed, by indigenous American healers, to be able cause cardiac death and thus cessation of biological life (13). From the perspective of biomedical research one is reminded of correlate studies of sudden cardiac death associated with hopelessness, in animal studies and human observation (15) and with anxiety (16).

In Native North America, prior to its devastation by Euro-colonialism, ethnographic archives report Native American populations as healthy, with rare obesity or dental caries observed, and few of the “white man’s” diseases (17, 18). With the destruction of North American cultures and the assimilation of their peoples into the modern Western culture, anomic devastation leading to depression, alcoholism, high suicide rates and obesity are now well documented (19, 20). In Central and South America some still intact indigenous cultures are still vital and not yet assimilated into the modern Western culture, but are aware of it and tribal elders feel threatened by it for the sake of the physical, emotional and spiritual health of their people, as well as their cultural integrity. As younger members of the Kichwa and Qero tribes of Ecuador and Peru abandon their mountain culture and move towards the urban centers, they begin developing, as elsewhere in the world, many of the diseases associated with the psychosocial and dietary problems of Westernized urban living-- at an alarming rate and disproportionate share of the burden of CVD. It is from within the context of the indigenous American vantage-point that listening openly to the impressions of several indigenous healers on modern Western society can be revealing.

A CONTEMPORARY MAYAN DIAGNOSTIC OBSERVATION

When indigenous healers have described their views of modern Western civilization, it has often been with diagnostic eye for the condition of the heart, the core of aliveness. Perkins (21) reports that when the Mayan Elder Candelaria was a child she often dreamed of visiting the USA. When she finally had the opportunity as an adult, she was surprised to find it was quite different than she had imagined. She reported that the buildings were bigger, the stores more opulent and the material possessions, the sheer number of cars a family owned exceeded her wildest expectations. But she was deeply struck by the level of unhappiness she saw everywhere around her. With all this material wealth, she expected to see more happiness. “Where are the laughing children working side by side with their mothers and fathers?” (21). And then she laid her finger on what she saw as a central cause of the unhappiness she saw: “My people have a saying that a person’s wealth is not measured by the amount of corn in the his field, but by the amount of sunshine in his heart” (21).

A PUEBLO CULTURAL DIANOSTIC

In the 1920s CG Jung (22) began his ethnopsychological investigations in Africa, India, and in the

Southwestern USA in order to find a leverage point for seeing more clearly the psycho-cultural features of European civilization that were invisible to him. He interviewed the Taos Pueblo medicine man Ochwiay Biano and inquired into his perspective on the “white man” (22).

Ochwiay Biano reported to Jung that the white man seemed quite mad to the Pueblos. When Jung inquired why they thought this, Biano said that the white man looked tense, restless, his jaws tight, his eyes always searching, but never knowing what they want. When Jung inquired of the Pueblo medicine man why he thought the whites were this way, he said it was because they “think with the head [meaning the mind]. Jung said, “Why of course, what do you think with?” and Biano pointed to the middle of his chest, indicating the heart (22). Jung felt immediately that he had gotten the leverage of culture-dystonic insight he sought into his own civilization. Jung struggled to find words for this insight, but was flooded with images which circumscribed it.

This Indian had struck a vulnerable spot, unveiled a truth to which we are blind. I felt rising within me like a shapeless mist something unknown and yet deeply familiar. And out of this mist, image upon image detached itself: first Roman legions smashing into the cities of Gaul.I saw the Roman eagle on the North Sea and on the banks of the White Niles. Then I saw St. Augustine transmitting the Christian creed to Britons on the tips of Roman lances, and Charlemagne’s most glorious forced conversions of the heathen; then the pillaging and murdering bands of the Crusading armies.

....It was enough. What we from our point of view call colonization, missions to the heathen, spread of civilization, etc., has another face—the face of a bird of prey seeking with cruel intentness for distant quarry—a face worthy of a race of pirates and highway men. All the eagles and other predatory creatures that adorn our coat of arms seem to me apt psychological representatives of our true nature (22).

Biano’s view that the white man lives by his great intellectual powers but no longer knows about the bodily felt and instinctual knowing of the heart [core of aliveness] is interpretively elaborated by Jung. He did not find it easy to hear, but he felt immediately that a pathogenic “blind spot” (i.e., a culture-syntonic factor) within Western culture had been identified by this old medicine man. Biano’s “diagnostic impressions” refer to the effect that this primarily mind-centered way of living is disconnected from heart, body, earth, community and respect for others (human and non-human others). These characteristics in turn engender signs of unhealth in the white man: restless stress, greedy and aggressive searching for more and more, pressured by artificial clocks and ignoring natural rhythms and cycles of nature.

Jung’s reflections about the Romans and the great Conquerers and Explorers can be equally difficult to listen too, for seeing our blind spots is generally emotionally painful and can be humiliating. But Jung believed the honest observations were, like empirical facts, ultimately friendly. He expressed gratitude for the way Biano had provided leverage for understanding a sector of problematic ideals and values (and thus of behavioral motives) within Western culture: driven by greed to domination, conquest, and violence against other peoples and other life forms. Correlating these observations with recent Western medical research we can note several of the CAD psychosocial risk factors are pinpointed right here within the cultural characteristics just noted: anxiety, social isolation, chronic stress, and hostility (1,4,5).

A SIOUX CULTURAL DIAGNOSTIC

Erdoes (23) documents the assessment of the Sioux medicine man and holy man John Fire Lane Deer. Lane Deer felt that the “white man” does not typically live by earth-honoring values, does not develop beliefs from his own direct experience, doesn’t listen to his own heart, and so does not know how to be in balance with things. Lane Deer, speaking in the spiritual idiom of his culture says:

They have forgotten the secret knowledge of their bodies, their senses, their dreams. They don't use the knowledge the spirit has put in every one of them [i.e., in the heart]. They are not even aware of this, and so they stumble along blindly on the road to nowhere—a paved highway which they themselves bulldoze and make smooth so that they can get faster to the big empty hole which they will find at the end, waiting to swallow them (23).

This brief excerpt of a large ethnographic report may be especially hard to openly consider because it also conveys a rather strong criticism borne by a Lakota Elder who has seen his own culture and people devastated by American colonialism and a history of broken treaties. Yet underneath this understandable layer of outrage is a sincere effort to speak honestly about what he sees as pathogenic in modern American society, and the effects on human life. From within his Lakota context (earth-honoring, heart centered and trusting of the wisdom of the body) the modern emphasis upon the use of the mind to bulldoze forests and grasslands, and pave them over with asphalt, build strip malls, devastate the ecosystem and myriad forms of life. This is not only believed to be a sacrilege, it is perceived unhealthy for humans as it cuts us off from the elemental resources of the natural landscape that sustain, nourish, and provide “medicine” for our lives. Living without being in close contact and in accord with the natural world is considered by indigenous Americans to be the end of living, and the beginning of existing.

A QUECHUA IACHAK'S DISAGNOSIS AND REMEDY

Smith (24) documents the theory and practice of the Quechua healer don Alverto Taxo, a contemporary Taita Iachak [shaman and elder] of the Atis Quechua (Kichwa) tribe. Don Alverto's reputation as a great healer stretches throughout Ecuador, Columbia, Peru and Brazil; he was elected a master shaman by the Shamanic Council of South America in 1989. He currently lives in the high Andes of Ecuador, in the Mount Cotopaxi region. Commissioned by the six million member Quechua tribe, he has been traveling back and forth between North and South America for nearly a decade, teaching from his tradition and healing wisdom at Harvard, University of Michigan, University of Notre Dame, and various inter-cultural exchange centers in the USA and Canada.

His reason for teaching in North America is because many of his tribe are still living their traditional and earth-honoring way of life, but he and his shamanic peers believe this situation will not last long, and the devastation currently going in with the widespread slash and burn economics of rain forests, and the encroachment of Western civilization in the urban centers of Ecuador and surrounding countries is bringing Western civilization's beneficial technologies, but also its stresses, diseases, and problematic environmental policies as well as a primarily mind-centered, heart-ignoring psychology.

His “diagnosis” of the industrial and technological North [by which he means Western civilization] is that it is over-developed mentally and under-developed feelingly. By “feeling” he doesn't simply mean emotion, although that is part of the human “capacity to feel”. He means heart-open sentient perception, instinctual knowing, intuitive knowing, holistic sensing. He and his people symbolize the powers of the mind by the “Eagle,” and the powers of feeling, of the heart, by the “Condor”. They must “fly together to be in balance,” he says (24).

The Condor, symbolically speaking, is considered a “bird of the South” [non-Western indigenous peoples]. Literally it eats carrion, and so is considered to be an environmental bird that helps clean up the environment—but it is not considered a prosperous bird, materialistically speaking. The Condor is also associated with the powers of the heart, and its prodigious “capacity to feel.” The Eagle, by contrast, is considered to be a “bird of the North,” meaning modern Western industrialized countries, symbolically associated with aggressiveness and materialistic concerns. It is also associated with the powers of the mind [i.e., the “intellect”], its capacity to create science and technology, the important capacities to analyze data and plan and theorize. The Eagle can

also be quite prosperous, economically speaking but without the Condor and its capacity to feel, the quest for prosperity can result in damage to all the earth's living beings, human and non-human.

In don Alverto Taxo's view, neither power in itself is good or bad. He admits that the indigenous people of Ecuador need to study and learn more about the power of the Eagle. The Quechua people he says are quite happy and celebrate life, often giving thanks for the beauty and sheer goodness of life. He does not make claims that they never get sick. In fact, as healer he is well aware that people can get out of balance, become depressed, anxious, as well as suffer from accidents and infections just like other peoples. He claims the conditions of life are hard economically and this can be frustrating. He is aware that Quechua people can suffer from a heart diseases (cardiac) related to dental caries, especially when teeth become infected (there is virtually no modern dental care in the High Andes). However, he claims the Quechua are a vibrant and spirited people and are in good health and marvelously resistant to sickness where they stay in balance and practice their indigenous ways of life, --and especially where they are not yet assimilating into the larger urbanized centers. Because the material conditions of life are difficult, and he feels his people now need access to the Internet and many of the educational, scientific and technological resources so plentiful in "the land of Eagles."

When he turns a diagnostic eye toward the industrial North he says that there is great stress and widespread unhappiness in spite of all the wealth and technological conveniences. The people of the North have tremendously developed the powers of the mind, the thinker, but they need more development of the capacity to feel, because their hearts are not open and connected to the natural rhythms, the cycles and seasons. They do not know how to use the intelligence of the heart (24). It is the heart which tells you what kind of life you most deeply want, and inspires you to live in a way that is natural to you. The mind (Eagle) cannot tell you this. The heart (Condor) is what gives you the calling, vision, or purpose for your life. Only following the leading of the heart can make you happy and help you know what is right for you. The mind's job is to further clarify that, and help you plan, strategize, remove obstacles and make it happen. To be in balance the mind and heart, Eagle and Condor must be in right relationship, with the mind as the servant of the heart. In this way they can fly together so we can be in balance (24).

A feature of don Alverto's cultural diagnostic of the "Land of Eagles" is that people become slaves to time pressure, and particularly have a conception of time that is artificial and not natural. It lacks the pulse, rhythm, and ripening of things in its own time quality. People are forced to live and move via imposed schedules that are not natural (i.e. they do not follow natural rhythms and cycles). He has found marriages suffering because work schedules do not permit quality relationship/connection time. He finds it odd that some couples schedule sex and romance for a designated night of the week. In his culture he says, you make love when the spirit arises and both of you are feeling romantic. In Ecuador, he says, we eat when we are hungry, not because a clock strikes noon (24). He claims that people of the North do not eat instinctually, when the body says its hungry. They do not pay attention in a fine discriminating way to what they are hungry for. In discussing the natural way to eat he mentions arranging the size of the meal to fit the energy expenditure levels of the day. In the morning eating a big meal makes sense to "power you up for the day." The midday meal should be off lesser size, and the evening meal should be quite small because he believes it will interfere with sleep and cause obesity and other health problems if you power your body with a large meal it cannot use.

Another kind of stress-causing pattern that he sees is the ceaseless wanting and self-doubt. "The mind", he insists, always wants to be kept busy, and when disconnected from the heart "drives you to want this and that, and it never is satisfied that it has enough of what it wants. It says you need more things to be happy, or more information. But its not true. You have everything you need to be happy if you open your heart in the moment and connect with whatever is before you, in the now. The mind is always telling you that you need more this or that before you can really live. But this is not true and the heart knows better, if it is listened to" (24).

Don Alverto does not only offer us a diagnosis of Western culture, he offers some therapeutic prescriptions as well. For the Kichwa peoples, as for indigenous peoples of the Americas generally, the Four Elements, Earth,

Wind, Fire, and Water are celebrated as the simple and fundamental constituents of the world. To put yourself in balance, to create or maintain health, you must attune to these powerful elements of Nature. As a Iachak don Alverto advises us to begin spending time with each Element. He says you can spend time quieting the mind and just opening your heart and let yourself feel the wind blowing through your hair. You can watch the wind move in the tree tops, you can imagine it blowing through your hair and removing your stress. As it does this it helps calm and center you and put you back in balance. He encourages a simple practice of greeting each element, as if saying “Hello” to it with your heart. You can sit by a pond or river and let yourself feel the power of water to comfort and renew you. You can imagine that shower you take as cleansing away inside stress, letting go of cargo you no longer need. Sitting on the soil is very grounding, he says, and good for absorbing your stress. The “ceremony of eating slowly” while focusing attention on the taste of the food, and “feeling the love of the Earth Mother in the food” provides the most immediate connection to the Earth, and the awareness that “we are each Mother Earth walking” (24). The element of Fire is also considered powerful because it relaxes, enchants, stirs the imagination, helps one center oneself and reflect naturally.

All these ways of connecting with the natural elements help to slow the mind, develop the capacity to feel, ease the stresses of living. They attune the person naturally, over time and practice, with the earth and landscape itself, its myriad life forms, its natural cycles and seasons. Living naturally is living healthfully in don Alverto’s view. The tension and stress of living in the modern world, and the emotional and physical diseases associated with living in the Land of Eagles, can be greatly lessened if we can learn to live, breathe, eat, play, and create more connectedly to the heart and the natural environment (24, 25).

HERMENEUTIC ANALYSIS

In order to translate these indigenous perspectives into our own modern cultural forms of understanding an interpretive analysis can be useful. The common thread running through this small qualitative sampling of four indigenous cultural diagnostic critiques of modern Western culture is the theme of mind (intellect) divorced from heart (core of aliveness) and the unfortunate effects this has in terms of personal stress and associated physical and psychological disorders, loss of truly supportive human community (isolation), damage to the environment, and so on. The indigenous conception of the “mind” views it as a psychological system that should be grounded in and synchronous with the psychological system associated with the more instinctual, intuitive, and holistic system of knowing and motivation of the heart (core of aliveness). In the indigenous view, the “mind” means more than the word “thinker” usually conveys in common modern usage. The “mind” being criticized is a psychological system that has its own kind of life and motivation when it is “disconnected” from the intuitive-instinctual-holistic psychology of the core. This mind, when cut off from its ground in the heart, is viewed as always wanting more and more. It always wants more knowledge, wanting more of whatever it focuses on, if it is money, then there is never enough, if it is sex, then it is never enough, if it is power or status, it is never enough.

This incessant wanting is believed to be the culprit resulting in many of the forms of sickness and disease that plague modern Western societies. The characteristics of this “mind” also include ongoing efforts to control and manipulate. Its capacity to reason and study in a rational manner is viewed by indigenous peoples as highly positive, but when the intellect is divorced from the core, it tends to control or dominate what does not come from within its own system. The feelings, the instincts, intuitions, tend to become repressed, dismissed, ignored, or viewed as irrelevant. In the indigenous view, the will to dominate becomes extended to nature, to other peoples, and is generally unhealthy for the human organism.

In the indigenous views presented here, the mind is not viewed as the cause of stress and resulting sickness. On the contrary it is typical for indigenous American peoples to admire the powers of the mind, particularly the intellect, and many of the good scientific and technological achievements of Western civilization that result from its high development. Don Alverto Taxo views the Internet, for example, as a real advantage, and many of the modern medical treatments are viewed as real triumphs of the mind (24). What is considered the

problem is the over-reliance on the mind when it is effectively cut off from its embodied and grounding core, the heart of the indigenous perspective.

It can be clarifying to compare the indigenous diagnostic idiom with analogous criticism coming within the modern idiom of Western society itself. The term “ego” can refer to ego-functions, that is rational and cognitive functions associated with reality-testing. These mental functions are analogous to the indigenous conception of mind and are an extremely important human capacity. On the indigenous view, “having a good head on the shoulders” is analogous to having good ego-functions. But “ego” carries another meaning, associated self-conception and ego-identity. This is the sense of “ego” can be amplified in a modern Western idiom where the indigenous critique is focused.

Psychologically speaking, the “ego” is a concept of self that is identified with early in life and reinforced by society and its’ ideals and range of roles, functions, rewards and sanctions. As an individual grows up within Western society, a mental concept is formed of “who I am” based on personal biographical and cultural conditioning. This concept of self is a kind of phantom, an abstraction of the complexity, and a reduction of the inexhaustible depth, and richness of a human life. We come to identify our being with this abstraction of the mind, at considerable cost to our bodily sensed comfort (the “feel” of organismic rightness) and depth of satisfaction in living. Since it is an ego-identification and not the real being of the person, this “egological self” always experiences itself as lacking and seeks to acquire what it lacks so that it can be satisfied, but it never feels satisfied because it always experiences itself as lacking. It does not turn to its own inward core to find what it seeks, but rather turns outward to external and social sources to acquire possessions which strengthen its ever-wanting sense of self. However, no possession seems to satisfy beyond a fleeting moment of acquisition. Hence the desire for more and more is set in motion. The indigenous viewpoint presented in this chapter can be considered more “being-oriented,” and modern Western culture as more “having-oriented (26).

The ego, constantly searching for more and more things or qualities to identify with, seeks to promote itself and defend itself; seeks to conform and to avoid being judged by others. It enhances its sense of self through its identifications with a variety of external sources: possessions and money, the kind of work you do, the level of social status or recognition attained, the level of education, the degree of physical attractiveness, and various roles and functions (e.g. teacher, parent, entrepreneur, executive, etc.) and so on. As don Alverto Taxo says, “None of this is you!” It’s all external goods and qualities. They may be of great personal and social value, but they may also be acquired at the expense of health and at cost to others. Ultimately they are transient and can be lost through misfortune or natural causes such as sickness, old age, and death. Such forms of self-affirmation are thus viewed as highly unstable and superficial. The indigenous prescription is not to base your value or fulfillment upon your possessions (What you have) but on your being (Who you authentically are). From the indigenous American perspective, it is only by living from the heart, with mind as its servant, that it becomes possible to find and experience this value and fulfillment.

This comparison of the indigenous idiom with a modern Western idiom should not mislead us into thinking that the Ego is the main focus of the diagnostic of the indigenous healers presented here. As such, the Western critique of the ego does not go deep enough. The ego is a product of the mind in its disconnection from the embodied heart (core of aliveness). In this disconnection from the core the person then identifies with a mental concept, the concept of the self, and this leads to a suppression of the body, and of its instinctual and intuitive wisdom. People then begin to live ways that are out of balance, causing stresses and developing modifiable stress-based risk behaviors that give rise to illness.

INDIGENOUS LIFESTYLE FACTORS

In the remainder of our discussion we shall shift away from the articulation of the indigenous paradigm cast in terms of the heart/mind and look at other pertinent dimensions of indigenous life, including patterns of diet and exercise as well as social dimensions not yet included in our discussion. We will primarily focus on one

specific subset of indigenous peoples—contemporary hunter-gatherers—as their way of life closely parallels that of our early ancestors during the 800,000 or more years of our evolution prior to the agricultural revolution 10,000 years ago (actually quite recent in evolutionary terms).

It has been said that to grasp the concept of ‘low risk’ and to apply it successfully in medical care and public health is to ‘reach for the jugular’ of the CVD-CAD epidemic (27). The degenerative diseases of the industrialized world are rare or nonexistent among hunter-gatherers and other indigenous people who have not yet adopted Western diets and lifestyles (28).

Comparative study suggests that the relative absence of modern "degenerative" diseases (heart disease, cancers, hypertension, diabetes, bowel disorders) reported among the San [of the Kalahari] is universal (or nearly so) among hunter-gatherers and subsistence farmers alike. Reports from a number of groups suggest that high serum cholesterol is extremely rare in such groups. Blood pressure is commonly low in such groups and does not increase with age, and widespread reports suggest that such intestinal disorders as appendicitis, diverticulosis, and bowel cancer are rare until groups are introduced to civilized diets. Diabetes mellitus is rarely observed--but becomes quite common among such populations introduced to civilized diets. Coronary heart disease and most cancers have been observed to be comparatively rare (28).

Accordingly, it may be useful to look at hunter-gatherer and indigenous lifeways for clues as to why this may be the case.

Western degenerative diseases have been shown to have a genetic component; our human bodies evolved over eons to ‘expect’ a specific set of conditions in order to thrive, just as is the case with other animals. Present hunter-gatherer peoples afford us a precious opportunity to look at these conditions in some detail. Their life ways are not identical with those of our remote forebears, but the archeological record shows that they are very close.

In particular, these six points may be suggestive:

1. Evidence links a high dietary intake of protective phytochemicals (29) from various sources with a reduced incidence of coronary heart disease (30) and other Western degenerative diseases. This may partially explain why hunter-gatherer and indigenous diets are so uniformly healthful. Though these diets vary greatly in terms of what is eaten, including relative proportions and kinds of fat, protein, and carbohydrates (31), a common factor among them is a high level of phytochemicals (32) -as well as potassium and other micronutrients readily found in fruits and vegetables.

Most often phytochemicals are ingested by eating the plants themselves; however, in some instances of indigenous diet they are (or were) acquired indirectly, via animal products which are sources of them. This was traditionally seen in areas with short growing seasons and long winters. Examples of this are the red pigment astaxanthin acquired by indigenous circumpolar peoples from wild salmon (which get it from krill); the deep yellow and gold of traditional Swiss cheese made from the milk of cows and goats grazing in the high pastures of the Alps (33); and the reindeer milk (mixed with greens and then stored through the winter) which the Saami of the circumpolar regions traditionally used. Circumpolar peoples also ate the stomach contents of the caribou:

The lack of greens in the diet seems like an insurmountable problem to someone brought up in the south, but a surprising number of vitamins are present in parts of the animals that make up the traditional Inuit diet. Caribou liver, muktuk, and seal fat and liver provide vitamins A, B, C, and D. Polar bear liver has vitamin A at levels that are toxic to humans. Traditionally the stomach contents of a slaughtered caribou were eaten, as well as its flesh. In this way the reindeer moss, arctic moss, liver wort and red mushrooms consumed by caribou are “cooked” by its digestive juices. (34)

Thus, even in cultures where long winters precluded the eating of fresh fruits and vegetables for much of the year, there still was a dietary source of phytochemicals. Circumpolar peoples did eat plant phytochemicals in the brief summers: the Inuit gathered roots, greens, wild blueberries, crowberries, and salmonberries (35), and the Saami gathered wood sorrel, ancelica, cloudberry, lingonberry and bilberry (36).

Phytochemicals are often pigments (37), and this is not happenstance. A pigment is a substance that imparts color. Throughout the world, foods which we should eat are “pointed out” to us by nature (i.e. the substances are registered as ‘colorful’). Our eyes draw us towards what is good for us. Examples of phytochemicals whose presence are signaled to us in this way are anthocyanins and betacyanins (red, blue, and purplish black); lycopene, and astaxanthin (red), beta-carotene and beta-cryptoxanthin (orange), lutein, zeaxanthin, and curcumin (yellow).

It appears that the phytochemicals present in fruits and vegetables work synergistically rather than in isolation and it’s best to eat them in whole food form where a variety are naturally present, rather than in the form of isolated extracts (38). Of course they were only available in whole foods through most of history.

2. A refined sugar- and grain-based diet displaces phytonutrients; important classes of phytonutrients are missing in refined sugar and grain. Partially this is due to the refining process; but even whole grains lack important pigment phytochemicals. When grains displace fruits and vegetables in the diet, the protection these pigments afford is lost. Grains, and legumes, may also more directly cause problems to their lectin content which can affect leptins (39). Grains indirectly consumed (via grain-fed meat) are also problematic, as animals fed grain produce a different less-favorable ratio of fats (40), and their milk no longer contains those phytochemicals which would have been present had the animals been eating plants instead of grain.

By definition, the original hunter-gatherer diets contained little or no grain, since grain-based diets depend on agriculture. Some horticultural peoples have kept what could be considered an ‘original’ diet- for example the Kitava of Papua New Guinea. The diets of the Kitavans are grain-and sugar-free, and among them Western degenerative diseases are rare or non-existent, leptin levels are low, and insulin sensitivity is high (41). (The Kitavan diet can be considered ‘original’ because it consists of substantially the same foods that would have been gathered from the wild in that geographic region prior to any cultivation.)

3. Some hunter-gatherer and indigenous peoples have low salt intakes—and most eat more potassium than sodium due to the natural abundance of potassium in fruits and vegetables—in contrast to Western diets in which the reverse is generally the case. A study of the Yanomamo, who add no salt to their food, shows that they maintain a low blood pressure which doesn’t increase with aging (42). It’s also been shown that adding salt to the diet of chimpanzees increased blood pressure for some (43).

However, limiting salt intake is not recommended for all people (in fact it’s contra-indicated during endurance athletic events particularly in high-heat conditions, and for pregnant women), and there is not an invariable pattern of salt intake which can be pointed to across indigenous cultures, as an evolutionary justification for one position or another. For instance, the Inuit people lived much of the year on coastal ice (which is partially desalinated sea water), and much of their food consisted of soup made with meat in a broth from this brackish source of water. When they went inland to hunt, they traditionally added caribou blood (also a rich source of sodium) to their soup (44).

4. The portion of our genome determining basic anatomy and physiology has remained unchanged for about 40,000 years. Thus, the relation between energy intake and outgo, and the kinds of physical activities which are most optimal for us, is substantially the same as it was for our remote ancestors. Since our ancestors were hunter-gatherers up to about 10,000 years ago (when agriculture began) it can be instructive to study present-day hunter-gatherers to see the physical activity patterns for which we were designed (45).

We have lost the intimate working-body relation with our food—we no longer have to expend energy in order to ingest each calorie. In contrast, hunter-gatherers walk to procure food, while carrying the food they gather, children, etc. Men typically hunt 1 to 4 days a week, with rest days intervening between hunting days; and women gather every 2 or 3 days on average. On days when they are not hunting and gathering, people engage in lighter physical activities such as butchering, preparing food, making clothing, fetching water and firewood, and moving camp. Dancing is also a common and frequent activity (46).

Aside from walking which is a prominent feature of much hunter-gatherer exercise, it also appears that the human body was well-designed for endurance running in the heat of the day: though much of our structure equally supports walking, aspects of the structure of the buttocks and legs appear to be specifically designed for running, and the lack of body hair plus the ability to sweat copiously makes it possible for human beings to run down animals which are bigger and faster, but which have to stop and rest and cannot sweat to shed heat (47).

This kind of hunting has been practiced up to the present, for instance by the G/wi of the Kalahari who will take off in the heat of the day in temperatures ranging from 102 to 107 Fahrenheit and track one animal for 5 or 6 hours, over 10 to 20 miles, until they run that one animal down and kill it (48). Among the G/wi this kind of hunting nets large amounts of meat—twice as much as with bow and arrow—and is more often successful than bow hunting. It's a highly successful strategy for which we are well adapted.

5. Hunter-gatherers are also still entrained in a daily rhythm of eating which keeps leptin levels high during the latter part of the sleep cycle, encouraging fat stores to be burned from that point until the fast is next broken. Leptin levels follow a diurnal rhythm and are highest between midnight and early morning hours and lowest around noon to midafternoon in all individuals—but the difference between nocturnal and afternoon levels has been shown to be significantly greater in lean individuals than in the obese (49).

The diurnal rhythm is very sensitive to disruptions in meal times:

Phase shifts in plasma leptin levels are apparent within hours of changing the meal pattern, and are not correlated with cortisol, which is a robust marker of the circadian clock. The diurnal variation is also not altered by acute sleep deprivation, and thus is not likely to be regulated by growth hormone or other sleep-related hormones. This study provides direct evidence that diurnal variation in plasma leptin levels is entrained to meal timing (50).

The Agta of the Philippines eat 3 meals a day: one early morning, one early afternoon, and one early evening (51). But most commonly, hunter gatherers tend to eat one big meal a day, in the late afternoon to early evening (46). There are variations—for instance, Ache men will sometimes eat leftovers in the morning before they leave on the hunt, or if they are out on a hunt for several days will eat some of the fresh kill; and Ache women will sometimes stay in camp all day and snack through the day—but the central pattern is of one big meal in early evening. This meal pattern in which the last (or only) meal of the day is no later than early evening reinforces the natural leptin diurnal rhythm.

This single-large-meal pattern is also consistent with research which shows that less-frequent meals positively affect the plasticity of the nervous system and its vulnerability to neurodegenerative disorders: periodic fasting such as is typical of hunter-gatherers has been shown to be even more effective than limited daily feeding, in increasing the expression of HSP-70 and neurotrophic factors of brains of mice, and is also more effective than limited daily feeding in protecting hippocampal neurons against excitotoxic injury. On the days the periodically-fasting mice had access to food, they consumed twice as much mice fed ad libitum. These periodically-fasting mice did not lose weight. Even so, they had favorable changes equal or greater to changes seen with reduced-calorie mice, including decreased plasma insulin and glucose levels. These findings suggest that increasing the time interval between meals to eat more as hunter-gatherers do may be beneficial, even when the size of the meals are increased to a level that results in no overall decrease in caloric intake (52).

6. For hunter-gatherers, life is autonomous, has immediacy, and is shared, in a band which is an intimate social group. This social form is part of our evolutionary heritage:

Although there may have been occasional visits with neighboring groups and likely seasonal rendezvous with other bands, Paleolithic life would generally have been lived in one's small band... Judging from social patterns among other apes and the archeological sites of related hominids, some version of a small human band extends several million years into our deepest past.

When we consider how profoundly persistent our evolutionary adaptations to that scale of sociality are, we can then realize that the larger tribal groups that arose in the Holocene constitute a major qualitative shift. Indeed, there were many threshold effects associated with this increase from Pleistocene numbers and scale...

Whatever the myriad dynamics and events of the past 10,000 years, I contend that the essential outlines of human culture were critically shaped by Pleistocene norms and I include human sociality in that, quite aware that our sociality is an amalgam of biology and culture (53).

It's been shown that close social connections have an effect on heart health:

Men who are socially isolated have elevated levels of a blood marker for inflammation that's linked to cardiovascular disease, according data from the Framingham Heart Study presented today at the American Heart Association's 45th Annual Conference on Cardiovascular Disease Epidemiology and Prevention.

"Our analyses suggest that it may be good for the heart to be connected," said Eric B. Loucks, Ph.D., an instructor in the department of society, human development and health at Harvard School of Public Health in Boston. "In general, it seems to be good for health to have close friends and family, to be connected with community groups or religious organizations and to have a close partner" (54).

Among the Ache, well over half of the food eaten by every man, woman, and child, was given to them by someone else. Those who are most skilled in hunting consistently share the most and receive the least, and the households with the most dependents receive the most food –that is, sharing is not an exchange, nor is it tit-for-tat reciprocity (31).

Those who give the most food are making a valuable contribution to their communities; their lives have meaning and value within their communities. Aside from the already-mentioned benefits of intimate social connection, life meaning has also been shown to be inversely related to male and female oncological, female cardiovascular, and total premature mortality rates (55).

Conversely, those who receive food have received social support.

The sharing experienced by hunter-gatherer peoples is profound. Not only food is shared: in addition, they share "tasks, dwelling places, company, stories, and memories. In a word, they share "each other" (56).

Social support has been found to have a threefold effect on stressor-strain relations: reducing the strains experienced, mitigating perceived stressors, and moderating the stressor-strain relationship (57).

Two other universally described aspects of hunter-gatherer life are also pertinent in job-related factors affecting cardiovascular health: autonomy (56), and immediacy (57).

Part of the inverse social gradient in cardiovascular disease has been attributed to low job control at work (58). It has been shown that mean plasma fibrinogen is adversely affected in jobs where workers have less autonomy (59); Time urgency and impatience (TUI) has been shown to have a long-term effect on hypertension (60).

The experience of immediacy is not one which is familiar to all Westerners. It has been described thus:

When I allow the past and the future to dissolve into the immediacy of the present moment, then the “present” expands to become an enveloping field of presence. And this presence, vibrant and alive, spontaneously assumes the precise shape and contour of the enveloping sensory landscape (61).

Time urgency and impatience is future rather than present-oriented, in contrast to the experience of immediacy in which one dwells in the present. It drops out immediate sensory experience rather than enhancing it. A high-time-pressure, low control work situation is the opposite of the autonomy and immediacy experienced by hunter-gatherers in the course of their daily lives.

These 6 points have been developed separately, but in fact, hunter-gatherer and indigenous diet, exercise, sociality, etc. are inextricably bound together—not isolated, but integrated dimensions of life—and as an undivided whole may well be found to be synergistic, just as the phytochemicals mentioned earlier work most effectively together rather than in isolation.

SOME IMPLICATIONS FOR COMPREHENSIVE PREVENTION PLANNING

Our ethnographic sampling of informants who offered cultural diagnosis on what they see as stress provoking and disease engendering factors within modern Western culture agree that the central problem is that we, the societal members, do not “check in with” or take our bearings in living from our own central core, what they call the “heart” in distinction to the cardiac pump.

They are clear that the mental powers associated with the intellect are magnificently developed in Western civilization and bring many benefits to humanity. They are also clear that there is an over-reliance on the mental activity that we associate with self-concept formation and under-reliance on taking direction in living from the experiential core, and its more holistic, instinctual and intuitive forms of knowing. Consequently they see members of our modern culture identifying with a socially constructed mental self-concept that is imposed on the rich intricacy of the human organism. This imposition causes stress, or distress to the organism as a whole, as the executive sense of self is taken from identification with a mental conception and not from the central core of the person. The strive-drive, the wanting of more and more that is never satisfied, all this leads to stress, unhealthy lifestyle choices (risk factors) and subsequently to human health problems and environmental harm.

From all this we submit that a key pathogenic variable in modern Western culture is a lack of emphasis, encouragement and support from an early age in developing the capacity to find, know, and honor our experiential core, and to use our intellect in solid connection with it, so that we can think with and from the “heart”, forming our concepts and taking bearings in our life from this inward source of holistic, instinctual-intuitive knowing. This would be mind and body, intellect and heart in concert, such that in any situation we could check in with our core, with the IGS, to determine a right way forward for us with any problem or stress that challenges us. A converse implication is that if we do not make this kind of shift we will most likely remain stuck with imposing of concepts, goals, and actions that are not healthful to our organism. We most likely will continue in our stress-engendering ways, and compensate with gratifications that are destructive to the organism as a whole.

The kind of culture-wide shift needed will require research and efforts beyond that of any given health care or human service profession (medicine, psychology, social work, education, pastoral ministry), for to be culture-wide it must work its way into all levels of society. It will require efforts of all professional disciplines concerned with health care, and more generally need support from other disciplines such as philosophy, the arts, religion, and the media. This may sound like a daunting task, and it is, but it is also doable. Social reform movements, such as the American Civil Rights movement, the Women’s Liberation movement, have gained

considerable ground over the past four decades.

We do not, however, need to start from scratch in comprehensive prevention planning of this culture-wide scope. There is a substantial body of research into how to develop skill in the kind of experiential knowing [bodily felt, instinctual-intuitive] by checking in with the core of person and organism through a “felt-sense.” A felt-sense occurs or forms at the mind/body interface, an experiential zone in which the body influences the mind, and the mind influences the body (62). The process of how to form and consult a bodily felt sense by dropping attention into the middle zone of the chest and attending inwardly there has been developed by Eugene T. Gendlin and fellow researchers at the University of Chicago (63). Hendriks documents more than 80 research studies on experiencing level and focusing skill, how to teach it to a variety of populations from childhood to old age, and its beneficial effects psychologically, educationally, physically, and spiritually (64). This research has shown that the capacity to focus on a felt-sense is essential to psychotherapeutic success regardless of theoretical orientation, and has many benefits in a variety of areas such as stress management, creative problem resolution, educational problem resolution, relationship problems, and coping with pain in cancer patients (62). Focusing skills training, because it can be taught to virtually anyone, and can be taught to children at home and in the class room, offers one viable key prevention strategy in bringing “heart” and “head,” body and mind into harmonious balance.

CONCLUSION

To open up research and inquiry into the role of culture in the formation of psychosocial risk behavior (for CAD / CVD), leverage is needed to examine our own culture and assumptive world from without and thereby render the unrecognized pathogenic influences as culture-dystonic (pathogenic and needing to be changed). Only when seen culture-dystonically can preventive strategies to change those pathogenic cultural influences become possible.

For individuals growing up within Western society, a mental concept is formed of “who I am” based on personal biographical and cultural conditioning. This concept of self is a kind of phantom, an abstraction of the complexity, inexhaustible depth, and richness of a human life. Identifying our being with this abstraction of the mind exacts a considerable cost to our bodily sensed comfort (the “feel” of organismic rightness) and depth of satisfaction in living.

The tension and stress of living in the modern world, and the associated emotional and physical diseases, can be greatly lessened if we can learn to live, breath, eat, play, and create more naturally.

The indigenous prescription is not to base our value or fulfillment upon possessions (What we have) but on our being (Who we really are). Living from the heart--with the mind as the heart's servant--it becomes possible to find and experience the value and fulfillment of our being.

Besides living from the heart, there are other psychosocial dimensions to the ways indigenous peoples can offer a West now looking for more natural and healthful cultural patterns. Especially among indigenous hunter-gatherer peoples, nearly-universal patterns of sharing, autonomy, and immediacy--as well as common patterns of diet and exercise--are much closer to the conditions which obtained during the period in which we evolved.

It is not possible to isolate just one 'key' factor which accounts for the significant degrees of absence of degenerative disease associated with modern Western culture among those indigenous (and hunter-gatherer) people still living traditionally: many factors operate together synergistically. The factors we have chosen to focus on here, are those which have clear links to Western biomedical research findings.

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