

Center for Mind-Body Medicine
COMPREHENSIVE CANCER CARE 2001: Integrative Complementary & Alternative
Therapies

KEYNOTE: THE AGE OF EXTINCTIONS AND THE EMERGING ENVIRONMENTAL
HEALTH MOVEMENT

Michael Lerner, Ph.D. Arlington, Virginia Sunday, October 21, 2001

PROCEEDINGS:

Dr. Fair: It's a pleasure to be asked to do this. Actually, both speakers this morning are people to whom I feel a great debt of gratitude, and I think I wouldn't be here without their help and support. Dr. Michael Lerner, after his training at Harvard, received a PhD in Political Science at Yale, and then had the rather unusual distinction of teaching at Yale in two departments, in Political Science and Psychology, a rather unusual combination, I thought, although Michael tells me that there's a lot of Psychology in Political Science and vice versa.

In 1972, he left Yale and went out to California, where he established a program called Full Circle, which was a residential learning center for children with learning and behavioral disorders. And this was the beginning of his entrance, I guess, into the three major areas that occupy his professional life, and that is kids, cancer, and the environment, as he puts it.

In 1976, he established the cancer help program in Bolinas, California, which has been so successful and emulated throughout a number of other places in the country, in the world, and that's known as Commonweal.

Michael was given a McCarthy Prize Fellowship in 1983 for his work on health. And from 1988 until 1990, he served as a special consultant in the Office of Technology Assessment and was very instrumental in preparing a major congressional report on unconventional cancer treatment.

Perhaps the thing that introduces his name to most people is his book on choices and healing, which I feel if you had to have one book in the area of complementary and alternative medicine, that would be the book to have. You can see it still stands as a definitive book on CAM therapies.

I owe him, as I said, a personal debt of gratitude and also to Dean because my own introduction to Commonweal came almost five years ago now. And I got a call from Dean Ornish one day to see how I was doing and I wasn't doing terribly well. Dean said you have to go to Commonweal, I'll talk to Michael Lerner, and it was one of those things, I said, well, I have this to do and that to do and I'm supposed to talk here.

And those of you who know Dean Ornish know that he's not easily dissuaded. And he said to me, Bill, you're not hearing me, I don't say it as an option, you have to go. And that followed up by phone calls, he called Michael and got my wife after me and so

forth, so I went going out there -- I went out there, and it was really a singular experience. And one of the things that I think those who have been at Commonweal or Smith Farm on the East Coast recognize that just as Michael did for his father, who had two cancers at the time, even though he did all this work in searching out alternative therapies, his dad, as I understand, never utilized these, and -- and it was Michael's philosophy, which comes across on the Commonweal program, that each person must find their own unique path to healing through whatever attracts them, and you can't force people into a path that they're not comfortable with.

But the thing that really struck me about Commonweal was the underlying message, never give up hope, and statistics are statistics, they're not you. And I think that more than anything else, he was the one that introduced or reinforced in my mind the idea that was almost the mantra of Commonweal, that healing is always possible even when cure is not.

And lastly, I think he has, although a non-physician, has a unique insight into the problems that physicians face, particularly academic physicians, because we're trained as scientists and clinicians. And the idea of a scientist is always to inculcate doubt, you're always questioning things, this may not work, it won't work because of this or this. But the idea and goal of a physician is do the opposite, inculcate hope, and it's this balance between the recognition of what might be of value despite the odds and keeping hope alive in the patient that is so important and is epitomized in the Commonweal approach.

So that I think we are very fortunate to hear from Michael. He'll share his thoughts with us on not only healing, but I think on the environment and the role of -- our role and the role of the country and the future in dealing with environmental problems. Without any further comments, I'd like to introduce Dr. Michael Lerner.

DR. LERNER: Good morning. Is this a penance that we're all up at 8:30 listening to talks? I don't think so. It's not a penance when Jim Gordon gathers such an extraordinary community of people together and when I'm introduced by one of the men I respect most, Bill Fair, when my friend, Dean Ornish, is in the audience, one of the most extraordinary people I know, who I hope to live to see get a nobel prize for medicine for his work in reversing heart disease, and I hope he will also be recognized for what I hope will be work in reversing cancer, as well.

And I think what Jim Gordon has done for our field just can really not be put into words. This conference is, without any question, the most important conference of its kind in the country, and it grows stronger every year, so it's an honor, Jim, to be asked to come and share these thoughts.

I want to just start by saying that in the past, Jim asked me to talk about the thing I really know best, which is choices and healing and cancer therapies, and as Bill mentioned, for many years we have offered these week long retreats at Commonweal, which are basically support programs for people with cancer.

I've just come from our 103rd retreat. The Smith Farm Center for the Healing Arts here in Washington offers this program on the East Coast. And it has been the most meaningful work of my life, because in the course of a week, one sees people make lasting changes in the way they hold their lives and the way they hold their illnesses.

And the reward of seeing that, whether people have early cancers from which they recover, or whether they have metastatic cancers which they are going to live with for as long as possible, the reward of that is so great that I still haven't been able to stop doing it.

But if you do that work for a while, if you spend enough time with young women, with young children with metastatic breast cancer, and you pull them out of the stream of sorrow that they're living in and help them to live as long as possible with metastatic breast cancer and then learn to say goodbye to their young children and their husbands, and you also realize that neither conventional therapies nor complementary therapies has a cure for metastatic breast cancer, or indeed for many other cancers that people face, although you can help people live better, there's no question, and perhaps live longer, and from time to time, there are, indeed, spontaneous remissions.

But nonetheless, for most young women with metastatic breast cancer with young children, they're going to die of this disease before their children grow up, before they see them graduate, before they see them get married. And when you've pulled enough of these young women out of this river of sorrow, you begin to wonder whether you shouldn't go upstream and see who's throwing them in.

And so that process of going upstream and seeing who's throwing them in is what I'm talking with you about this morning. Because about a year ago I wrote an article in *Advances on the Mind-Body Health Movement* at 25 and on the shared experience that many of us who have been working in the field for over 25 years have had.

And I suggested that whereas Mind-Body Health Complementary and Integrate of Medicine has greatly expanded on a horizontal access, the number of options for treatment that patients and health professionals have, and on a vertical access, it has increased our understanding of the psychological and spiritual dimensions of healing.

It has failed in a truly extraordinary way, to ground itself in the social, economic, and environmental determinance of health, which is an incredible failing for a movement that prides itself on a higher ethical standard and on truly holistic thinking.

Given that the evidence for any cure for cancer among complementary cancer therapies is very, very sparse, indeed, but the -- the evidence that the social, economic, and environmental determinance of health have everything to do with who gets sick is very, very, very strong, and yet we act in Mind-Body and Holistic Health almost as if it didn't exist.

And that is a really extraordinary testament to an area in which we have failed very profoundly. And if the past 25 years have been about expanding the range of options and going up into the psychological and spiritual, I believe that the next 25 years of our movement have to be about grounding our insights in the social, economic, and environmental determinance of health.

Because the truth of the matter is, as my colleagues in the fields of biodiversity, ecosystem health, and sustainable development will assure us, we live in an age of extinction. We are driving biodiversity, the sacred tree of life, back 65 million years to its lowest level of vitality since the end of the age of dinosaurs. This is the sixth great spasm of extinctions in the history of the earth, and this great dying of all life is being caused by man.

Now, there are five well recognized drivers of this new age of extinctions that we're living in, and they are climate change, ozone depletion, toxic chemicals, habitat destruction, and invasive species and infectious agents.

Now, of these five, and I'd like you to note this, three are caused by our unwise use of oil and petrochemicals. That is to say climate change, ozone depletion, and toxic chemicals all relate to the lack of wisdom with which we have taken this precious substance that flows from the Middle East and elsewhere and created the century of hydrocarbon man in which we have lived in the 20th century.

Now, to these five drivers of extinction that we're dealing with today that are causing this sixth grade spasm of extinctions in the history of the earth, one has to add what Bill Joy the chief scientist of Sun Microsystems, in a very prescient article in Wired Magazine last year called The Future Does Not Need Us, we have to add additional potential sources of mass extinction. So Bill Joy spoke of the fact that in the 20th century, we created weapons of mass destruction, nuclear weapons, chemical weapons, and biological weapons. And in the 21st century, we face the prospect not of weapons of mass destruction, but of technologies of mass destruction, and those technologies were biotechnology, nanotechnology which is very, very small devices, mechanical devices, and robotics. And of those three, biotechnology already has the capacity to create entities that will multiply out of control in the environment and cause extinctions of other species. And nanotechnology and robotics will not be terribly far behind.

So what does this mean, that this actual and potential drivers of extinction are threatening life in such a profound way? What does it mean for our future and the future of all life on earth?

James McNeal was the director of the Bruntland Commission, which 25 or more years ago created the concept of sustainable development. And Jim McNeal often talks about, for historic reasons, about four possible futures that we face, and those four futures are business as usual, we might have more business as usual, we might have a descent into chaos, we might somehow achieve a sustainable future, or we might become artificial people on an artificial planet.

Now, the truth is that it isn't actually a choice among these four futures, what we're actually talking about is some combination of percentages of all four. To some degree we'll have business as usual, to some degree we're certainly experiencing descent into chaos, to some degree we are achieving sustainability, and certainly we are also becoming artificial people on an artificial planet.

And so we're working to create as much sustainability in that mix as possible. But the greatest paradox of this, which many people do not realize, is that a just and sustainable future is actually the most artificial future of all. And the reason it's the most artificial of all is that the other futures, business as usual, descent into chaos, and becoming artificial people on an artificial planet, will happen of their own accord no matter what we do.

But sustainability involves what the great scientist, Rockefeller University scientist Renee Dubois accurately described 30 or more years ago, as an awareness that we would need to cultivate the earth as a garden. And any gardener knows that the art of gardening, the art of gardening is artifice. And so to create an earth garden in which justice and sustainability prevail is an act of great artifice, it is a form of artificial, it is an artificial future, but it is the best artificial future, and it is the one that requires the highest state of human consciousness.

Now, where can we find the consciousness to create a more just and sustainable future? Where is the hope in this age of extinction? How do we keep the faith of Gandhi, of Martin Luther King, and of all the others who've come before our women and men who have believed that democracy and justice can really be our future instead of weaponized anthrax and weaponized smallpox and a global 50 year war against terrorism that simply continues to create systems of -- of warfare and domination of the rich by the poor in ways that simply breeds more of the terrorism that created that terrible, terrible event that has brought us into war?

How do we create in the face of what we're facing today? How do we hold that faith of a dream and a better future? And I've learned a lot from cancer patients about how you do that. And I often talk to cancer patients who are facing life threatening illnesses the way the earth is facing a life threatening illness about a beautiful quote from the Czech playwright and statesman Vaclav Havel where he talked about the difference between optimism and hope. Optimism, Havel said, is the belief that everything is going to go right; hope, he said, is very different; hope is a deep orientation of the human soul that can be held in the darkest of times.

Now, it is difficult to be optimistic about the future, but it is even more difficult to live in our age without hope. Just as a cancer patient faced with a life threatening cancer may find it difficult, indeed, to be optimistic, but harder still to live without hope.

So in a very deep sense, the people I see who are surviving best in this period that we are entering, there are people who are keeping their faith, who are keeping their hope, and who are keeping a sense of compassion about everybody involved in where we find

ourselves now, because hope, faith, and compassion, hope, faith, and charity, are at the core of all the great spiritual traditions and what they have to say to us about how to live in difficult times.

I believe we have a very real hope about how to move from this age of extinctions that we are living in into a new age in which the deepest values of civilization, so beautifully described in our constitution, are extended to people everywhere. I believe that we are witnessing, that we are witnessing today, we are witnessing the emergence of a global environmental health movement led above all by women linking together all those who are coming to understand that their personal health is threatened or actually effected by the actual and potential forces of extinction, by climate change and starvation, by ozone depletion, melanoma and immune suppression, by toxic chemicals and the dozens of pandemic health conditions that they contribute to, by habitat destruction which changes the garden earth into T.S. Elliott's wasteland, by invasive and infectious agents like the HIV epidemic, and by the weapons and technologies of mass destruction that Bill Joy has described and that are on the front pages of all our newspapers and in television today.

So let's look more closely at what that emerging environmental health movement looks like by focusing on only one of these drivers of extinction, which is toxic chemicals. Over the past seven years at Commonweal, we've been very involved in educating people locally, nationally, and internationally on the dangers of endocrine disrupting chemicals as described by Theo Colburn and John Peterson Myers and Diane Dumanoski in their now classic work, "Our Stolen Future." Because the new science on endocrine disrupting chemicals, which many of you are familiar with, shows how these chemicals, like dioxin, and DDT, and PCB's are stored in body fat, and then when women become pregnant, these chemicals release signals at parts per billion or parts per trillion that mimic the woman's estrogen signals to the developing -- endocrine signals to the developing fetus and misguide the development of the fetus, effecting health, intelligence, and fertility.

Now, among the diseases that are increasingly linked, either through endocrine disruption or through more classic toxicology to chemicals in our bodies, because we are all, every one of us on earth carrying hundreds of chemicals in our bodies that were not there a century ago, that were not there before the age of hydrocarbon man, but all of us are now carrying these chemicals, these hundreds of chemicals in our bodies and they are disrupting the development of -- of developing fetuses in humans and many other species, as well.

And as the science on endocrine disruption develops, which talks about their capacity to do this at far lower levels than we previously understood, there is growing evidence that these chemicals are related to learning and behavior disorders of children, including lowered IQ, but more than that, birth defects, asthma, childhood cancers, testicular cancer, lymphomas, breast cancer, infertility, endometriosis, hypospadias, which is a defect of the male genital system, the shifting birth ratios of females to males in the

population, autism, Parkinson's Disease, chemical sensitivities, immune disorders, shortened duration of lactation, and many, many other conditions.

So there really -- we're living in a time of pandemic health conditions related to chemical exposures. I mentioned shortening of lactation last on that list, and this next section of this talk is the saddest thing that I have to say to you all morning, which is that speaking of breast milk, you should all read Sandra Steingraber's new book. She is the author of a classic book called "Living Downstream, An Environmentalist Looks At Cancer In The Environment." And she's now written a new book called Having Faith. Sandra is an extraordinary cancer survivor who grew up in a very toxic part of the Middle West. She had an early cancer as a young woman. She is a poet, she is a scientist, she is an environmentalist, and she was able to have a baby after having had cancer as a young woman, and so she called her daughter Faith, and she called the book Having Faith.

And the book is about what it is like for Sandra as a scientist to breast feed her baby, Faith, knowing, and this is the saddest thing I will tell you, that breast milk is the most toxic human food. And the reason for that is that we are not, as we often think as the top of the food chain, many of us understand that the chemicals in the environment biomagnify by a -- by a function of 10 to 100 every time you go up a step in the food chain.

But we are not at the top of the food chain. The people at the top of the food chain are breast feeding babies, and they receive -- what happens is that when the mother begins to lactate, there is a mobilization of the persistent organic pollutants in her body, and the only way to significantly reduce your body burden of toxic chemicals is to get pregnant and breast feed your baby.

And in breast feeding, you download a very significant portion of those chemicals to your baby which receives a significant part of its lifetime body burden of chemicals from the mother, and this is the fact. Despite the fact, and I want to emphasize this, that breast milk remains by far the best food for babies, that breast feeding, even with the chemical exposures is better than not breast feeding, because the real damage is done during fetal development, and the breast milk has enough positive factors in it so that the studies show that the breast fed babies with toxic exposures do better than the babies who were not breast fed. But when we have reached the point that the single purest and most sacred act of human nurture involves the transmission from mother to child of a significant part of the infant's body burden of toxic chemical, I think we've gone too far.

I think we've reached the point in the evolution of hydrocarbon man when it is time to change course. And I think that that's the reason, when I spoke of the emerging environmental health movement, as led by women, that you can begin to understand, because I believe that the right to bear and breast feed babies toxic free will be seen as one of the defining human rights issues of the new millennium, that, you know, that is such a fundamental of human right, that a young woman should be allowed to do that, and that we have not given permission to anybody to put these chemicals in our body,

and we must withdraw this, you know, form of renting of space in our body to the chemical industry, which we did not consent to, and return to a world where women can breast feed without that concern.

So how are we organizing at a practical level to create a world where women can bear and breast feed babies toxic free? At the grass roots level, we're supporting women like Margie Richards, the founder of Concerned Citizens of Norco in Norco, Louisiana, who is struggling to relocate her African American community that is on the fence line of a Shell chemical plant, where many days, if you visit, you can't spend more than a few hours without beginning to feel sick from the toxic fumes with which this African American community lives day in and day out.

We're supporting Margie Richards and we're supporting hundreds and hundreds of other women like Margie in fence line communities across the United States and around the world.

Then we are supporting groups who are working in every industrial sector to reduce chemical exposures and reliance on toxic chemicals in those sectors. And most notably, and this is something every one of you in this room can do something about, we are working with Health Care Without Harm, which is a campaign that started at Commonweal five years ago with 30 citizens who gathered together because we didn't think it was right that the health care system should be a leading source of dioxin and mercury contamination of Americans and people everywhere else in the world, mercury from thermometers largely, dioxin from PVC plastics and plastic bags and so on and so forth, when there were alternatives to both.

You didn't need mercury thermometers, there were better plastics that were less toxic than the PVC plastics that are in wide use. Five years later, simply by the efforts of these 30 people, there are now over 300 organizations in 30 countries around the world, and it is leading to a global movement to ban mercury thermometers, and it is moving to a -- it is leading to a global movement to replace PVC plastics with less toxic plastics in health care.

And medical waste incinerators, which is one of the main ways that the mercury and the plastics are disseminated through the air, fall onto the ground and into the water, the cat will eat it, and it comes back to us in dairy and beef products, goes into the body of the mother, bioaccumulates, and then comes out in her breast milk, we don't want to be part of that cycle in health care anymore.

We need to clean up and green our industrial sector if we are going to play the leading role that we must play as public health -- as -- as health professionals in the emerging and environmental health movement, because it has been absolutely true of every major advance in public health since we did something about infectious diseases in the -- in the 19th century that these movements succeed when physicians and other health care practitioners join in citizens in taking the lead to make a change. And the changes have been phenomenal. Not only did we largely control infectious disease to a

very great degree from the 19th century on, but also there have been other things, like physicians against nuclear war, which played a key role in the nuclear test ban treaty, the role of the health professionals in smoking, you know, one can go on and on, a handgun control.

When health professionals join hands with citizens, then industry cannot stop us from making the changes that we need to make. So Health Care Without Harm is one example of what we created over the last five years in more and more industrial sectors, and these were grass root spaced campaigns with very wide coalitions of support, not just environmentalists, but labor, religious people, educators, health care professionals, health effected groups, very, very wide groups, focusing not so much on regulation, but on forcing corporate change in the market place, because the great vulnerability of the corporate system is the brand name system.

And because most of the value of international corporations is in their brand names, and when large coalitions of citizens can point to things that these corporations are doing wrong and threaten campaigns that will effect the brand name and the brand value, they negotiate. And so that process has brought non- governmental organizations and these coalition into active, constructive negotiations in partnership with leading corporations. These are not always adversarial processes, because people are beginning to understand that we're in this together, and many of these corporations are very interested in best practices and moving forward.

So Health Care Without Harm is a model of that, but we see the same thing taking place in agriculture, and the Pesticide Action Network, and the sustainable agriculture movement, and the healthy schools movement where we're reducing pesticides and chemically treated wood in schools and playgrounds, in the Healthy Building Network where we're moving in the construction industry against toxics in construction, in the Silicon Valley Toxics Coalition, in the computer industry, in military toxics campaigns, in the Global Anti-Incinerator Alliance, and in the International Pops Elimination Network, the International Persistent Organic Pollutants Elimination Network.

My wife, Shaw Patent at Commonweal was the Northern Co-Chair of this international of network of over 300 organizations, which recently culminated in a successful treaty to ban or phase out the 12 most toxic chemicals in the world, which President Bush has said he will sign, and which is an example how -- how all these industrial sector campaigns, working together with the grass roots groups like concerned citizens of Norco, are making a profound difference in international regulation, as well.

Now, the newest piece of our work in this, in addition to the grass roots group at the bottom, the international treaties at the top, and then you can imagine a barrel, grass roots groups at the bottom, the international treaties at the top, and each industrial sector campaign is like a stave in the barrel, but what holds them together? What are the bans that hold the whole barrel together?

And then again, just like Health Care Without Harm, this is an area where you can make a difference, and that difference is, we are going to bring together the health effected groups. We are going to bring together the breast cancer, learning disabilities, endometriosis, immune disorders, Parkinson's, autism, immune deficiency, chemical sensitivity, we are going to bring together the chemically related groups and the health care professionals who care about those chemically related groups in a global environmental health movement, and that is going to be the glue of the whole thing.

And so one can see that, you know, just at the very concrete level, if a new bill is up before the U.S. Congress or a state legislature and you have a couple of environmentalists show up to say we really don't like these chemicals, that's not very powerful. But if you have a mother with systemic lupus, and a mother with breast cancer, and a mother with a learning disabled child, and a mother with an autistic child, and everybody getting up and holding the science about how these chemicals effect their children and effect their families, those legislators are going to listen in a very, very different way.

And so these health effected groups and the health professionals who care about the health effected groups are the cavalry of the emerging environmental health movement. They will come into these industrial sector campaigns and to these efforts to get better legislation and they are going to make the difference.

So likewise -- so I want to talk finally about how September 11th effects this emerging environmental health movement, because there is no question that we are living in a new world, and so all of us who are involved in the emerging environmental health movement are thinking very deeply, and this is something Jim Gordon and I were talking about, because on the one hand, everything has changed since September 11th; on the other hand, the deep truths have not changed. We're still living in an age of extinctions. We still are driving biodiversity back 65 millions years. We still need an emerging environmental health movement. But the strategies are going to change, because in this environment, there are things that work and there are things that don't work. And it's still too early to know exactly how this is going to work, but the first lineaments of what we think is happening have begun to emerge.

In times of war in America, two things happen; one is the descent becomes more difficult, there is a very real thing there, so that campaigns that we used to do to hold corporations up and ask them to change the way that they do business are more difficult right now because nobody wants to hear about chemicals in treated wood when we're worried about bioterrorism, that's a fact.

So the strategy that we've been using for the last five years or so of market focused campaigns isn't going to work so well right now. We don't know how long that will last. But the converse of the fact the descent becomes more difficult is that there is a very deep sense of unity that comes about. There's a deep sense that we're all in this together. And that deep sense of unity is something that we can work with, so that while it's more difficult to criticize right now, there are new opportunities, and one of these

opportunities which is an enormous one, is that in the face of bioterrorism, there is an opportunity to rebuild the public health movement and the public health system in the United States.

And because a strengthened public health system nationally and internationally is one of the things we need most for an environmental health movement, in other words, if we're going to have a healthy world, we need a healthy public health system, both nationally and world- wide.

And Laurie Garrett's profound book, "Betrayal of Trust", shows how we have been systematically ignoring public health for the last 50 years both nationally and internationally. So the opportunity to rebuild the public health system is a profound opportunity that is -- is supported by virtually everybody nationally in the face of bioterrorism.

Similarly, at the international level, a Bush administration that once was inclined to go it alone in international affairs now needs cooperation on bioterrorism, and no one less than Tony Blair was in the United States not long ago, and the thing he chose to say publicly, along with supporting the -- the war on terrorism, was that we all needed to think together about climate change. So that the United States cannot really pull the world together on -- on terrorism if it's not willing to cooperate in some other areas, as well, like climate change, like ozone depletion, like toxic chemicals, like habitat destruction, so that sense that we're in it together -- that sense that we're in it together begins to play toward collaboration and cooperation, both nationally and internationally.

But at an even deeper level than rebuilding the public health system and the climate change treaty, September 11th has created a global teaching on a question of great concern to many Americans, which is why do they hate us?

And if you follow that question and follow what you've been watching on television, it's not long before the more thoughtful newspapers, the New York Times and also the networks, to a remarkable degree, begin to explain that what creates a huge audience for insane demagogues is the profound inequities, the profound structural inequities of the global system, where instead of creating a sustainable world where resources are shared with enough equity so that everybody gets enough to create decent conditions in countries around the world, we are creating these enormous areas of the world where people are simply starving, and they simply can't get by, and that is the fundamental place in which terrorism takes form, always has been and always will be. When people are desperate enough, that's where it comes from. And so God willing, we prosecute this war successfully without too much damage and find the people responsible. But at the end of the day when you've found the people responsible, if you stop there, people are beginning to understand that you're leaving the conditions in which other folks like this are going to show up again.

And so this global teaching is creating an opportunity to think about inequity and equity at a level that we haven't been able to reach people for many, many, many years.

So the strategies of the global movement for health environment and justice will change as of September 11th. But the deep realities that we face in this age of extinctions have not changed at all, and in fact, they've become more vivid and more urgent.

I want to close by returning to the relationship between personal and planetary healing that has fascinated Jim Gordon and fascinated me and others of our colleagues for a long time. Because the simple truth is, September 11th brought a deep wound to America, and we awoken to an unending war against terrorism, and that awakening has been a lot like being diagnosed with a life threatening illness. It's as if we had all been diagnosed and told, you know what, September 11th was only the beginning, now you face 50 years or more of an unending war against terrorism and the presumption that people will try to come back at us and the need for a security state in which we're protected from all this and living, you know, with terrorism indefinitely, and you know, all of the consequences of that. That's a pretty grim reality that we're all dealing with.

And you just look at all of the different indices of what's happening to people. People in chronic pain are having more pain, drug abusers are doing more drugs, weight loss clinics are having more people show up for that, alcoholics, you know, you name it. Every index that you can find of stress and distress, we're seeing increases of, and we're told that we're going to need to live with this for the next 50 years, you know.

So what happens when it's just exactly like a life threatening illness like cancer? So what happens when people are diagnosed with a life threatening illness, we know. Some people close down into anxiety, cynicism, despair, closing down as much as possible, but other people do something else, other people open up.

Other people recognize what Dame Edith Sitwell once said of William Blake, she said he was cracked, but it was through the crack that the light came. You know, sometimes when we are cracked by something, sometimes when there is a wound, the wound is not only a wound, the wound is an opening. And of course, Young's concept of the wounded healer, that sense that goes back to one of the deepest human roots, the shamanic tradition, which like the incest taboo, they are the two universals in all human societies.

And the shamanic tradition of the wounded healer was that the wounded one was able to find the way and guide others. So there is a, you know, historically -- historically, wars have changed our civilization and changed all civilizations.

We will be changed by this war. The question is the specific direction of that change. The question is, will we be changed toward closing down or will be change toward opening up? And if we change toward opening up, one of the things that happens to cancer patients who open up is that the things they thought were important before, like more money, and more prestige, and more material things, and so on and so forth seem less important. And deep core values of the human soul seem more important -- of September 11th, and which way are we going to go in the face of the life threatening illness that we all face right now?

Are we going to close down or are we going to open up? I think it's a really deep question. And just as I suggested that health professionals have a key role to play in the emerging environmental health movement, I would suggest that health professionals, and particularly health professionals like those of us in this room, have an absolutely key role to play, both in ourselves and with those we serve, in guiding people toward a compassionate opening response to this new world in which we live, because it is only through that opening, it is only through going to the deeper places in ourselves that we will find the way to cultivate the earth as a garden and to create a just and sustainable future. Thank you very much.

Dr. Fair: Thank you so much, Michael. I was saying to Michael, it's exactly what we needed to hear.

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