

THE DISEASE DELUSION, BY JEFFREY S. BLAND, PH.D.

Report and comment by David G. Schwartz, M.D.

How could disease be a delusion? Are not diseases real? A disease is an abstract concept that ties all the symptoms and signs together for taxonomy purposes for insurance, and for legal purposes to limit the treatment of these conditions to qualified professionals. It is not a useful concept if it simplistically reduces a very complex process to a single name, when there are myriad manifestations of that “disease” in different people. Diabetes in one person isn’t the same as diabetes in another person. Treatment for one person with heart disease isn’t the best intervention for another person with heart disease. One size does not fit all. A more useful and effective model is needed.

A paradigm shift is now taking place, comparable in magnitude with the discovery of the germ theory and the ensuing historic hygiene and antibiotic era. This is functional medicine.

Dr. Jeffrey Bland, on the forefront of the “functional medicine revolution” for the last 40 years, has been a university biochemistry professor, the cofounder of the Institute For Functional Medicine, and the founder and president of the Personalized Lifestyle Medicine Institute. He has authored more than 100 scientific publications and 10 books and has taught more than 100,00 health care practitioners in more than 40 countries about functional medicine. Now he has presented a comprehensive discussion of functional medicine in this book, readable by the general public and useable by health practitioners. This offers an opportunity to get to the causes of health problems and increase health and wellness.

The old paradigm was based on a historical disease model in which the main threats were from acute problems such as infectious diseases, injuries, and complications from childbirth. The whole current infrastructure, including medical education, hospitals and clinics, pharmaceutical industry, insurance reimbursement, and treatment guidelines are still based on that crisis care model.

Meanwhile, the main threats to health, wellness, and longevity that has steadily, gradually crept up on us is chronic illness. This is no longer a plague limited to the northern and western industrialized countries, but it is rapidly becoming global, rising sharply in the countries with developing economies. Even infections are no longer so easily treated as they once were, as antibiotics lose effectiveness against “super-bugs” as a result of overuse.

The old paradigm is not working so well since it is largely not curing or healing chronic sickness but is mostly treating signs and symptoms without going to the causes of the problems. For example, high blood sugar can be a sign or symptom, which makes up the diagnosis of a “disease” called diabetes if it is above 124 mg% fasting. Bringing the sugar down with a drug into the non-diabetic range can reduce some of the risks of complications of diabetes, but not entirely. Bringing the sugar completely down to an

optimal level like 80-90 with drugs actually increases risk. The treatment may eliminate the sign or symptom, but it does not remove the cause of the elevated sugar. In contrast, lifestyle and environmental modifications that result in the sugar coming down to 80 mostly eliminates any degree of risk attributed to high blood sugar, and it does so much more safely. It naturally heals the imbalance in the endocrine system that was caused by nutritional deficiencies and excesses, lack of exercise, environmental toxins, etc., and allows normal physiological function to take over. To accomplish this may require careful investigation of the complex causes, by the provider and the patient as a team, as well as considerable work on the part of both to correct the causes, investing in time and effort up front to save huge expenses in the end.

To treat the symptoms, calling them a disease, giving it a name for which a specific drug can be used (a process called reductionism), is trying to solve a complex problem with a simple solution. Would not using a hammer to beat a screw into its hole instead of taking the time to screw it in with the screwdriver seem crude? We need a more intelligent approach to healing.

In the disease paradigm, the thinking is that the causes of chronic illness are genetic, microbial, or unknown, or due to lifestyle and environmental factors about which we are powerless to do anything. We are due a better explanation that works.

We can see that this current medical system is not working to solve the problem when we observe that as more treatments are provided, people get sicker, and people follow a trajectory that includes more and more drugs, as they become more and more disabled with time, until they die a very expensive, prolonged death, mostly in hospitals with many tubes in many orifices and with many attached wires and electronic gadgetry. Chronic illness now affects ½ the U.S. population, accounts for 78% of medical costs, and is the main cause of absenteeism and lost productivity at work. In addition, how do we quantify the burden of pain, disability, and the sorrow of losing the quality of life? We can put up with adversity if it is a sacrifice for accomplishing a better life in the future, but to see it as an end game that gets worse and worse is not very inspiring. We can do better than this.

I have had professional experience with both the disease model and with functional medicine. The latter has been gratifying, to see people in charge of their own health plan with my assistance, reversing many conditions not thought to be reversible.

After completing the course in ACLS (Advanced Cardiac Life Support), while working in the emergency department at a hospital, I directed a resuscitation team who treated a man who had suffered a heart attack and a cardiopulmonary arrest at home. We utilized all available methods – CPR, intubation, electric shock, and several drugs. At last his heart started beating and he was able to breathe on his own. His family was glad to see his body alive and awake, but he had severe neurological damage and was severely disabled from that day on. I pondered, “What had we done, and how could this have been prevented in the first place? Many times a heart attack is treated with a stent in the coronary artery to remove the clot with good recovery, but often the coronary

atherosclerosis progresses to make more clots in the future at some time when life-saving emergency medical or surgical care may not be timely available. There are drugs that are somewhat preventive in nature, that reduce the risk of future heart attacks by approximately 30%, but they do not restore normal cardiovascular physiology.

Another example of the failures of the old paradigm is the dangers in drugs and hospitalization. Safety testing of a single drug is done over a few years, yet this drug is given to a patient over a lifetime, sometimes in combination with other drugs (polypharmacy) for which studies have not been done. Sometimes one drug is given to combat the adverse effect of another drug, and much is unknown about their total interactions with each other. Now ADR's (Adverse Drug Reactions) are a leading cause of death. Hospital medicine is such a complex system that frequent errors are also a leading cause of death.

What is different about the functional medicine model? It looks for causes of chronic illness in imbalances in 7 major physiologic functions of the body, engaging practitioner and participant as a team to design a personalized health management program. It utilizes all appropriate methods, including lifestyle and environment, foods, supplements, body work, herbs, as well as recommendations for drugs and referral for surgery when appropriate.

Dr. Bland cites the groundbreaking work of Dr. Dean Ornish, a cardiologist whose lifestyle study demonstrated that coronary disease and prostate cancer could be reversed without drugs or surgery. His heart program is now being used successfully by many hospital cardiac rehab programs and is approved by Medicare.

The author also refers to Dr. James Fries' study, which showed that people with high-risk lifestyles and environments developed twice as much disability as people at low risk, over a period from 1962 to 1998. Dr. Fries coined the term, "compression of morbidity," meaning squeezing the length of time between the onset of disability and death, and lengthening the "health-span," the time before disability begins. The healthful lifestyle not only prolongs life but also prolongs healthy life, with a sharp increase in incidence of sickness shortly before death, with a much smaller proportion of the life span spent in chronic illness.

Dr. Bland also discusses the genome project that revealed that genetics are much more complex than was thought previously. Genes are turned on or off and their expression finely tuned by environmental factors, nutrition, lifestyle, etc. Each individual has a version of the same gene that governs a certain function, that could be different from the gene of the next person, and variations in these genes, called SNP's (single nucleotide polymorphisms) affect the health of each person. These polymorphisms are too numerous for a drug to be developed for each one.

Many of the SNP's affect nutritional needs that over time can lead to chronic illness unless nutritional adaptations are made. A poignant example is PKU. If dietary modifications are made starting in infancy, severe mental deficiencies and early death can

be avoided. Less dramatic examples are being discovered such as the MTHFR polymorphism that influences folic acid needs and utilization, and that can affect risk for depression, heart disease, and dementia. Providing extra folate in the correct form can reduce these risks.

Autism does not have one single gene, but 300 genes are related to autism. Each child with autism has different needs from the next. It is a spectrum of disorders with no single cause. The dramatic rise in autism cannot be attributed to genetics, which remains mostly the same over time.

The Pima indigenous people in Arizona had no diabetes until 1940 when they started eating refined sugar, starch, and fats, and now they suffer one of the highest rates in the U.S. Diabetes could not be blamed on their genes.

This understanding of genetics demonstrates their complexity. It is common for people to say, “My father had diabetes and I guess I will too,” as if fated by genetics. Not so. Many people hope medical science will find one gene for each disease (as if a disease had one cause) and a drug or a genetic modification to cure the disease. They will be sorely disappointed to find out that it just doesn’t work that way. A few rare genetic disorders could be cured in that way, but most chronic illnesses cannot. We need to get to the environmental factors and change them.

Dr. Bland discusses cases studies of people, Peter, Catherine, and Joe, each of whom has symptoms that involve several organ systems and that cross several medical specialties. Which specialist should he or she see if medical specialties are largely based single organ systems? Each needs a unique plan based on normalizing his or her complex network of physiologic function imbalances, partly due to his or her unique genetic needs.

Functional medicine takes a systems approach. All the systems of the body, immune, nervous, endocrine, digestive, etc., are intricately linked in a network. What affects one system can affect all the other systems.

What about the body’s natural ability to spontaneously restore balance without our intervention? It does that already, but if its corrective measures are constantly thwarted over time by a toxic environment, poor nutrition, etc., poor health becomes the “new normal,” and a quantum change in “homeostasis” or “homeodynamics” takes over. Then it becomes much more difficult to correct, than if the imbalances had been addressed earlier, with our assistance to the body’s self-corrective actions.

Part I of this book introduces the context of the current epidemic of chronic illness for which functional medicine is called to address, as I have described above.

Part II Presents the 7 core physiologic processes that can become unbalanced to cause illness. It has self-assessment questionnaires for the reader to look for imbalances and ways to bring them back toward balance. The seven processes are 1. Assimilation and

Elimination. 2. Detoxification. 3. Defense. 4. Cellular communication. 5. Cellular transport. 6. Energy. 7. Structure. Each of processes crosses over several organ systems. This makes a health care method that focuses mainly on organ systems look overly simplistic. Each chapter in Part II covers one of these physiologic processes with a symptom questionnaire, a thorough discussion of the process, and how to improve or heal it.

Part III goes into detail on helping to bring each of these 7 processes into normality, based on the answers to the questionnaires, suggesting lifestyle, diet, exercise, and nutritional supplements.

The appendices have a baseline 7 day eating plan, a glossary of scientific terminology, and a list of a wealth of resources for more information, tools, and organizations. None of the recipes have any gluten-containing grains. I personally would make a stronger warning than he does to avoid all corn, soy, canola, and cottonseed products that are not specifically labeled “organic” or “Non-GMO,” as most of these products are GMO, and I think the evidence is clear for harm or potential harm from genetically modified products.

This book covers very thoroughly the discipline of functional medicine whose time has come to replace the old paradigm of disease-oriented care for chronic illness. It has some technical detail, which some readers may find daunting, and it may seem wordy and repetitive in some areas, but mostly it is very readable and has very practical suggestions for self-help in a very understandable way. I have been using principles of functional medicine in my practice for many years, and I plan to make use of these more detailed and focused questionnaires and action plans.

Several pages have icons for scanning by a smart phone for interactive and multimedia content.

Functional medicine has been utilized already for several decades by many medical doctors, osteopaths, naturopaths, homeopaths, dentists, herbalists, chiropractors, acupuncturists, nutritionists, massage therapists, and many lay people. In my opinion, this can be a major force to improve people’s health, and it is available to everyone. It does not require certification or licensure, because it does not diagnose or treat any disease, it does not prescribe any drugs, and is not the “practice of medicine” as it would be defined by what MD’s and DO’s are licensed to do, and it is not a substitute for medical care when drugs or surgery is needed. It may make requests or suggestions for tests, treatments and referrals by a licensed practitioner.

The title of the book is brilliant, because functional medicine goes beyond the disease paradigm with a fundamentally different way of restoring good health that complements conventional medicine. Since Dr. Bland has a PhD instead of an MD, he comes to the field with a fresh approach, able to bypass a lot of the thinking characteristic of the conventional model of medical care.

An important caveat: We must remind ourselves that this model cannot completely replace the disease model of medicine that require drugs, surgery, and hospitals. There are still injuries, infections and other acute illnesses, emergencies, and needs for surgery. There are still genetic defects that cause 30% of chronic illness. Also, when chronic, debilitating illness has gone too far for too long, deranged physiology may not be correctable by any means, and it needs to be managed by treating symptoms with conventional medicine (along with natural methods of palliation).

Functional medicine also is not always successful in reaching its goals. People do not always follow recommendations; they may not follow up on testing due to financial constraints; (Many tests are not covered by insurance.); they may not find supplements, herbs, and organic foods affordable; and some may not recover from their adverse health conditions in spite of a good effort.

Functional medicine requires full engagement by the person who wants better health (whether called a “patient”, “client”, or “participant,”). The health care provider does not come up with a solution and tell the person what to do, but offers information, advice, and encouragement. The participant is engaged, curious, desiring to understand the conditions, and is self-empowered to take action. This does require some study of the issue on the part of the individual. This book provides information and resources for the person who wants to take charge of this process.

If functional medicine is to be successful in transforming public health, the whole society and culture needs to be engaged to establish the support needed to transform our environment to create better health. It needs to develop the political will to address pollution, poverty, racism, and injustice, as all of these factors affect the ability of individuals to have more healthful lifestyles and environments.

We need to be “proactive”, to learn about what is healthy physiology, and to promote good health before illness develops if we want to have the best results. It takes much more work to restore health after chronic illness develops.

Functional medicine may not be the “salvation” of our whole health, but it could make a huge shift in the way we deliver health care, with natural methods being mainstream and conventional medicine with drugs and surgery being the “alternative medicine.”

A key factor in the successful transformation of health care into utilization of functional medicine is teaching the population about the enormous complexity of how our bodies work. This book can be a major force in educating people in health promotion, prevention, and natural methods. I would like to see it become a best seller.