May 1998 Issue | Eleanor Barrager, A.P.D.

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Welcome to *Functional Medicine Update*TM for May, 1998. We are witnessing a transition in the new healthcare delivery system we call managed care. A recent article by Dr. Ronald Glasser, "The Doctor is Not In," begins as follows:

"We are born, we live, and then we die, but these days we do so with less and less help from a medical profession paid to discount our suffering and ignore our pain. Proofs of the bitter joke implicit in the phrase 'managed care' show up in every morning's newspaper, in casual conversations with relatives or friends recently returned from a hospital or from what was once thought of as a doctor's office instead of an insurance company's waiting room, and in a country generously supplied with competent and compassionate doctors, 160.3 million of us now find ourselves held captive to corporate health-care systems that earn \$952 billion a year but can't afford the luxury of a conscience or a heart."

That is a powerful beginning to this essay, which appeared in the March issue of *Harper's Magazine*, a publication that commonly has a liberal, but very insightful point of view into what is happening in our society. Dr. Glasser, a well-known writer on medical evaluation, is a pediatrician from Minneapolis and author of several books. In the *Harper's* article he discusses the manifesto published recently in the *Journal of the American Medical Association* in response to the trend toward managed care. The 1997 manifesto states the following:

"The time we are allowed to spend with the sick shrinks under the pressure to increase throughput, as though we were dealing with industrial commodities rather than afflicted human beings.... Physicians and nurses are being prodded by threats and bribes to abdicate allegiance to patients, and to shun the sickest, who may be unprofitable. Some of us risk being fired or 'delisted' for giving, or even discussing, expensive services, and many are offered bonuses for minimizing care."

Dr. Glasser believes the managed care system was meant not to care for sick people, but to take care of and manage money. It is evaluated on the basis of what he calls "medical loss ratio." Medical loss ratio refers to individuals who use expensive medical services versus recruiting people into the system who are reasonably healthy and do not use medical services. The goal is to be a highly profitable, managed care HMO provider. You get all the people who do not use the services, and as soon as they get sick, you try to get them out of your system because that makes it unprofitable. It presses doctors into ever-increasing cost constraints and judgments about how to apply technology. This article is a useful review of where we are today in the transition phase in the evolution of our healthcare system.

I take exception to one point Dr. Glasser made, however. That is the foundation of functional, predictive,

and preventive medicine. I use this example in this month's discussion because it opens the door to what we are trying to accomplish in functional medicine. With a tongue-in-cheek approach, Dr. Glasser goes on to say:

"SICKNESS IS THE PATIENT'S FAULT, AND DEATH IS A PREVENTABLE DISEASE: Because we live in a society that equates youth and wellness with intelligence and superior moral character, the health-care industry can pretend that it really isn't supposed to do anything at all. If the patient hadn't been so careless – if he or she had given up smoking and drinking, read the complete works of Andrew Weil, cut down on the day's fat intake, checked the blood pressure, ridden the stationary bicycle, ingested the correct amounts of garlic and zinc, gotten in touch with the inner child – then the patient wouldn't be making so many awful noises, wouldn't be conspiring to harm the 'medical-loss ratio,' wouldn't be bothering doctors (busy and important people, albeit overpaid) with the miserable proofs of their weakness and stupidity."

"No health plan advertises the fact that a good many patients admitted to the hospital with a diagnosis of a myocardial infarct have few or none of the so-called risk factors for a heart attack. They are not smokers; they are not overweight; they are not hypertensive; they exercised; they have normal cholesterol. No plan sends out notices or memos that one in 25 births will have a congenital defect, or that a third of patients with diabetes run the risk of going blind."

"In truth, it is a dangerous world out there."

While I congratulate Dr. Glasser for helping the reader understand the origin of problems with the present medical system – he eloquently points out that the excessive focus on medical loss ratio through managed care as a way of purportedly increasing cost efficiency of healthcare delivery occurs at the expense of quality care to the medically disadvantaged, I take exception to his view on the value of predictive medical services. He suggests that sickness is now being defined as the patient's fault. "Because we live in a society that equates youth and wellness with intelligence and superior moral character," he says, "the health-care industry can pretend that it is not really supposed to do anything at all." He implies that a doctor who is providing preventive medical services – what we might call functional medicine – is not doing real medicine. The illustrations incorporated into this essay are photographs of intubated, anesthetized patients receiving high technology "real" medicine. The examples with which Dr. Glasser uses to reinforce his thesis that illness strikes even the best-intended individuals and wellness medicine is of little value include: myocardial infarction in the absence of the usual risk factors for heart disease, the 1 in 25 infants born with a defect, and the one third of patients with diabetes who risk going blind.

INTERVIEW TRANSCRIPT

Clinicians of the Month: Eleanor Barrager, A.P.D. Dan Lukaczer, N.D. Barbara Schiltz, M.S., R.N., C.N. HealthComm Research Center Gig Harbor, WA 98335 phone: 253.851.3943 phone: 800.843.9660

This month in *Functional Medicine Update*TM, we have our own clinicians from the Functional Medicine Research Center (FMRC) in Gig Harbor, Washington as Clinicians of the Month. These are people doing the difficult clinical work that results in my being able to talk about the implications of these clinical case studies on *Functional Medicine Update*TM. The three people who are going to represent our center include Eleanor Barrager, a registered dietitian from Australia; Barbara Shiltz, a nurse with her master's degree in nutrition and nearly 20 years experience in areas of standard medicine and, more recently, functional and nutritional medicine; and Dan Lukaczer, clinical services manager, a naturopathic physician and graduate of Bastyr University.

B: Eleanor Barrager, please tell us about the purpose and history of the Functional Medicine Research Center and the kind of work you are looking at there.

EB: When we established the Functional Medicine Research Center about six years ago, our goal was to have a research center devoted to the development of integrated clinical therapies, as well as new assessment technologies to assist the practice of functional medicine in a clinical setting. We began with just a few patients with particular disorders and used a variety of functional tests. We tried to determine aspects of their unique biochemistry and physiology that might be contributing to their signs and symptoms.

If several patients responded to a similar intervention for the same types of signs and symptoms, we then developed pilot studies to see if we could reproduce these results in other patients with similar symptoms. In some cases, we were very excited to have not only reproducible results, but also very good efficacy in our treatment protocols. This led to the development of multi-centered, IRB-approved clinical trials.

Several laboratories expressed willingness to work with us to develop functional tests from which we were able to assess various parameters in these chronically unwell patients. Those tests measured things like intestinal permeability, digestive function, and detoxification ability. Our own in-house food technology and quality control departments work with us at the FMRC to develop various delivery forms of nutrients to nutritionally support some of the functional disorders we uncover in our patients. A number of employees here at HealthComm have been willing guinea pigs, assisting us in the development of lab tests and intervention programs over the years. I am also proud to say we have followed the principle of *primum non nocere*(first, do no harm), respect for patients and participants, full disclosure, and voluntary consent. As a result, we have had many willing volunteers and participants.

Not all the activities have been conducted at the Gig Harbor site in Washington. Many clinicians participating in our multi-centered clinical trials offered their time, skills, staff, and facilities to help us develop a functional medicine approach. If *FMU* listeners would like more information about our on- and off-site studies, including nutritional modulation of detoxification pathways, delivery of nutritional and dietary modifications to improve gastrointestinal function, and, more recently, research looking at the antigenicity of rice protein and rice flour, they can contact us here at HealthComm. We will send copies of research reports or reprints so that they can read in more detail about the exciting work we have been doing over the past six years.

JB: It has been amazing to watch the evolution of the research center, the studies we have engaged in, and the quality of staff we've developed over the last six years. One of those staff members we are pleased to have with us is Barbara Schiltz. Barbara has been involved with patient management and clinical trials, and she is currently engaged in an off-site clinical trial in Arizona with one of our physician colleagues who has offered his office and some of his patients to participate in this study. Barbara, could you tell us a bit about the current FMRC trials?

BS:

I'll tell you about the trial I am working on here in Arizona. We are working with chronic fatigue immune dysfunction syndrome patients. We are testing their detoxification pathways, immune systems, and antioxidant levels on a placebo arm, or a regular intervention arm, using a medical food, some supplements, and an elimination diet.

Bibliography

- 1. Glasser RJ. The doctor is not in. Harper's Magazine. March, 1998:35-41.
- 2. Steward L, Leighton H, Bethea M, Andrews S, Balart L. *Sugar Busters!* Sugar Busters LLC, Metairie, LA. 1995.
- 3. McGarry JD. Glucose—fatty acid interactions in health and disease. *Am J Clin Nutr*.1998;67(suppl):500S-504S.
- 4. Wolfe RR. Metabolic interactions between glucose and fatty acids in humans. *Am J Clin Nutr.* 1998;67(suppl):519S-526S.
- 5. Garg A. High-monounsaturated-fat diets for patients with diabetes mellitus: a meta-analysis. *Am J Clin Nutr.* 1998;67(suppl):577S-582S.
- 6. Britton J, Knox A. Respiratory medicine. No cures but some advances. *Lancet*. 1997;350(suppl III):24.
- 7. Cook D, Carey I, Whincup P. Effect of fresh fruit consumption on lung fuction and wheeze function. *Thorax.* 1997;52:628-633.
- 8. Knekt P, Jarvinen R, Seppanen R. Dietary flavonoids and the risk of lung cancer and other malignant neoplasms. *Am J Epidemiol*. 1997;146:223-230.
- 9. Nestler JE, Jakubowicz DJ. Decreases in ovarian cytochrome P450c17*a* activity and serum free testosterone after reduction of insulin secretion in polycystic ovary syndrome. *N Engl J Med.* 1996;335(9):617-623.
- 10. Waterworth DM, Bennett ST, Gharani N, et al. Linkage and association of insulin gene VNTR regulatory polymorphism with polycystic ovary syndrome. *Lancet*. 1997;349:986-990.
- 11. Sattar N, Hopkinson ZE, Greer IA. Insulin-sensitising agents in polycystic ovary syndrome. *Lancet.* 1998;351:305-306.
- 12. Velazquez EM, Mendoza SG, Hamer T, Sosa F, Glueck CJ. Metformin therapy in polycystic ovary syndrome reduces hyperinsulinaemia, insulin resistance, hyperandrogenemia and systolic blood pressure, while facilitating normal menses and pregnancy. *Metab.* 1994;43:647-654.
- 13. Casimirri F, Biscotti M, Gambineri A, Calzoni F, Eliana B, Pasquali R. Metformin improves insulin, body fat distribution, and androgens in obese women with and without the polycystic ovary syndrome. (abstract). *Int J Obesity*. 1997;21(suppl2): S61.

- 14. Crave JC, Fimbel S, Lejeune H, Cugnardey N, Dechaud H, Pugeat M. Effects of diet and metformin administration on six hormone-binding globulin, androgens and insulin in hirsute and obese women. *J Clin Endocrinol Metab.* 1995;80:2057-2062.
- 15. Fujimoto Y, Ohhira M, Miyokawa N, Kitamori S, Kohgo Y. Acarbose-induced hepatic injury. *Lancet*. 1998;351:340.
- 16. Sheth SG, LaMont JT. Toxic megacolon. Lancet. 1998;351:509-513.
- 17. Elmer GW, Surawicz CM, McFarland LV. Biotherapeutic agents. A neglected modality for the treatment and prevention of selected intestinal and vaginal infections. *JAMA*. 1996;275(11):870-876.
- 18. Mullin JM, Kampherstein JA, Laughlin KV, Saladik DT, Soler AP. Transepithelial paracellular leakiness induced by chronic phorbol ester exposure correlates with polyp-like foci and redistribution of protein kinase C-a. Carcinogenesis. 1997;18(12):2339-2345.
- 19. Guihot G, Blachier F, Columb V, et al. Effect of an elemental vs a complex diet on L-citrulline production from L-arginine in rat isolated enterocytes. *J Parenteral Enteral Nutr.* 1997;21(6):316-323.
- 20. Rohr FJ, Lobbregt D, Levy HL. Tyrosine supplementation in the treatment of maternal phenylketonuria. *Am J Clin Nutr.* 1998;67:473-476.
- 21. Bessman SP. Historical perspective: tyrosine and maternal phenylketonuria, welcome news. *Am J Clin Nutr.* 1998;67:357-358.
- 22. Omenn GS, Beresford SA, Motulsky AG. Preventing coronary heart disease: B vitamins and homocysteine (editorial; comment). *Circulation*. 1998;97(5):421-424.
- 23. Graham IM, Daly LE, Refsum HM. Plasma homocysteine as a risk factor for vascular disease. *JAMA*. 1997;277(22):1775-1781.
- 24. Hornberger J. A cost-benefit analysis of a cardiovascular disease prevention trial, using folate supplementation as an example. *Am J Public Health*. 1998;88(1):61-67.
- 25. Markle HV. Coronary artery disease associated with *Helicobacter pylori* infection is at least partially due to inadequate folate status. *Med Hypotheses*. 1997;49:289-292. Husten L. B vitamins linked to cardiovascular disease. *Lancet*. 1998;351:502.
- 26. Cupp, MJ, Tracy TS. Cytochrome P450: new nomenclature and clinical implications. *Am Family Phys.* 1998;57(1):107-116.
- 27. Suhara T, Sudo Y, Yoshida K, et al. Lung as reservoir for antidepressants in pharmacokinetic drug interactions. *Lancet.* 1998;351:332-335.
- 28. Cramer DW, Harlow BL, Titus-Ernstoff L, Bohlke K, Welch WR, Greenberg ER. Over-the-counter analgesics and risk of ovarian cancer. *Lancet*. 1998;351:104-107.
- 29. Kalow W, Tang BK. Use of caffeine metabolite ratios to explore CYP1A2 and xanthine oxidase activities. *Clin Pharmacol Ther*. 1991;50:508-519.
- 30. Butler MA, Lang NP, Young JF, et al. Determination of CYP1A2 and NAT2 phenotypes in human populations by analysis of caffeine urinary metabolites. *Pharmacogenetics*. 1992;2:116-127.
- 31. Nakajima M, Yokoi T, Mizutani M, Shin S, Kadlubar FF, Kamataki T. Phenotyping of CYP1A2 in Japanese population by analysis of caffeine urinary metabolites: absence of mutation prescribing the phenotype in the CYP1A2 gene. *Cancer Epidemiol Biomarkers Prev.* 1994;3:413-421.
- 32. McQuilkin SH, Nierenberg DW, Bresnick E. Analysis of within-subject variation of caffeine metabolism when used to determine cytochrome P4501A2 and N-acetyltransferase-2 activities. *Cancer Epidemiol Biomarkers Prev.* 1995;4:139-146.

- 33. Yang CS, Brady JE, Hong JY. Dietary effects on cytochromes P450, xenobiotic metabolism, and toxicity. *FASEB J.* 1992;6:737-744.
- 34. The Persian Gulf Experience and Health. NIH. Technology Assessment Workshop Statement. April 27-29, 1994.
- 35. Watson P, Marcus JN, Lynch HT. Prognosis of BRCA1 hereditary breast cancer. *Lancet*. 1998;351:304-305.

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