Optics Journal: Editorial

Published 2013/06/03 ©Optics Journal (2013)

ISSN: 1936-9808

Excerpt from: F. J. Duarte, Laser Physicist (Optics Journal, New York, 2012)©

On modern medicine

The western public looks at modern medicine, and its practitioners, in excessive reverence. Little do they know that many of the technical marvels in this area are due to advances in physics and engineering. That is, physics and engineering applied to medicine. In this exercise, the physicists and engineers that have made possible these advances get little or no credit. To illustrate this point the reader should think for a moment of a medical profession devoid of optics, lasers, MRI facilities, or advanced electronics.

Albeit interested in biological and medical applications of lasers I have been, in general, fortunate to keep myself away from the reaches of "organized medicine." The last time I had antibiotics was in the late 1970s and the only "medicine" I take is a small aspirin. Maintaining distance from the medical profession requires work. I do so by consuming only the necessary calories and exercising daily. I don't eat red (or processed) meat and keep away from sugar, fat, and fast food. I weight about 70 kg (~ 155 lb, at a height of 179 cm or ~ 70") which is ~ 10% over the weight I had when at school.

Many of today's society health problems are associated with bad societal habits and the expectation is that organized medicine should cure it all. Thus people over indulge, over consume, engage in risky behavior, and then expect the taxpayer to take care of the mess. Add to this some widespread tactical problems, such as poor diagnoses, unnecessary surgery, erroneous surgery, over use of antibiotics, rampant hospital infections, and a horrendous reality emerges. Some medical practitioners today don't even take seriously the Hippocratic Oath ("never do harm") and prefer to promote risky surgeries over safer less costly alternatives.

Additional problems include the nasty side effects associated with many of the chemistry-based pharmaceuticals, the so called "medicines." Also, treatments such as cancer chemotherapy are borderline barbaric. One should also question the inability of the medical profession to come up with cures to wide spread diseases such as diabetes and the common cold.

Given the high cost of modern medicine, and the increasing numbers requiring care, western societies face a daunting dilemma. In this regard, people should be encouraged to take responsibility of their own health. Governments should be marginalized from decisions that belong to individuals and their immediate families. The reality is that those individuals that are better informed, have an edge.

F. J. Duarte