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Correspondence

Four Cs of Physician Slavery

In his editorial, "The Four Cs of Physician Slavery," Dr. Huntoon accurately identifies the problem of physician apathy that exists in this country today. When I was chairman of my department, I tried on numerous occasions to bring to the attention of my department members concerns, not only with my specialty of anesthesiology, but with medicine in general. On every occasion, I was met with accusations of trying to "politicize" the issues of the day.

Sadly, most physicians are unwilling to enter the battle, and as Dr. Huntoon points out, most prefer to let a small minority carry on the fight. So how many physicians did anything to "promote freedom and integrity in medicine" last year? Very few I'm afraid.

My own specialty society, the American Society of Anesthesiologists (ASA), has done little to carry on the fight for the profession. In recent correspondence it proudly boasted about the "great Medicare victory" – the 1.5% increase in Medicare physician fees.

Prior to World War II, the British Prime Minister, Neville Chamberlain, appeased Nazi Germany and returned home to disclose a similar "victory." Unfortunately, the ASA has chosen this same course of appeasement.

As noted in the ASA report from Washington, D.C., "...several ASA members have excoriated the ASA leadership for being willing to beg for the 'peanuts'"...and have urged that the leadership develop a "backbone." I applaud those physicians who have finally reached the breaking point with our specialty's lack of leadership. I place the American Medical Association in the same category, not only for their lack of leadership, but for their complicity with the government takeover of our profession.

Throughout these difficult times, AAPS and organizations like the Heritage Foundation have chosen to confront the problem head on, just as Winston Churchill did at the beginning of WW II. Just like AAPS, Churchill was quick to see that appeasement is never the solution when confronting evil. And, make no mistake about it, the call for socializing medicine, or for a single-payer system, is evil in the purest form.

Every physician who still believes in the sanctity of the patient-physician relationship must rededicate himself to fighting against the spread of socialized medicine, government interference, and all of the liberal forces that pay no attention to the principles upon which our founding fathers built this great nation. Just like Churchill, we have a monumental task before us:

You ask, what is our aim? I can answer in one word: It is victory, victory at all costs, victory in spite of all terror, victory, however long and hard the road may be; for without victory, there is no survival.... Come then, let us go forward together with our united strength.

May we never forget what an honor and privilege it is to serve our fellow man. And, may we go forth with "backbone" and resolve to preserve what we know is right.

Anthony Maresca, M.D.Brookfield, WI

¹ Huntoon, LR. The Four *Cs* of Physician Slavery. *J Am Phys Surg* 2003;8:101.

Radiation Exposure in Taiwan

I read with some amazement the article by Chen et al.¹ that appeared in the Spring 2004 issue of the Journal. The authors reported remarkably low rates of cancer mortality among individuals, and congenital malformations among their offspring, following inadvertent exposure to radiation from ⁶⁰Co contaminated steel that had been accidentally used in the construction of apartment blocks in Taiwan during 1982-84. Large numbers of residents were exposed before the discovery of the contamination in 1992. Chen et al. ¹ suggest that their findings support the notion that chronic irradiation may be protective against cancer. There are, however, severe shortcomings in this paper that lead one to question the conclusions.

Chen et al.1 found just seven cancer deaths among 10,000 exposed residents, and three congenital malformations among their offspring, against expected numbers of 232 deaths and 46 malformations calculated from Taiwanese national rates. Two primary questions immediately follow: how were the residents and their children unambiguously and accurately identified, and how have the cancer deaths and congenital malformations in these groups been comprehensively and accurately traced? Unless these fundamental requirements of an epidemiological cohort study such as this can be unequivocally demonstrated, no reliance can be placed upon the results because serious biases could be present. The correct identification of several thousand individuals, and then establishing their vital status and causes of death over many years, is a major exercise. It is astonishing, therefore, that effectively no information is presented in the paper to address these allimportant issues. The reader is left with no idea how the basic data for this study were assembled. Under these circumstances, the most realistic conclusion is that the great majority of cases were missed.

There are many other problems with this paper. For example, the expected number of cancer deaths should have been adjusted to take into account the age structure of the exposed residents, which might differ from that of Taiwan as a whole. Further, it is most unlikely that the average dose for the high-dose category, where most of the epidemiological information will reside, has been calculated correctly. The calculation

appears to assume a uniform distribution of individual doses between the lower dose bound for the category and the highest dose received by a resident, which almost certainly seriously overestimates the average dose and hence the predicted number of radiation-induced health effects. Overall, the paper contains a surprisingly large number of fundamental errors.

The primary purpose of peer review is to maintain a minimum standard of papers published in the scientific literature. If this fails, then the scientific community is liable to be overwhelmed by findings from unreliable studies. The paper of Chen et al. should have been subjected to more rigorous peer review prior to being accepted for publication.

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Chen WL, Luan YC, Shieh MC, Chen ST, Kung HT, Soong KL, Yeh YC, Chou TS, Mong SH, Wu JT, Sun CP, Deng WP, Wu MF, Shen ML. Is chronic radiation an effective prophylaxis against cancer? *J Am Phys Surg* 2004;9:6-10.

In Reply: As explained in the article, this incident was a "serendipitous experiment," not a carefully planned and executed clinical trial. The AEC of Taiwan conducted an intensive research program to measure the radiation levels in approximately 1,700 apartments and to study and document the health of the residents who lived in these homes, especially the 1,600 people who lived in apartments that were highly and moderately radioactive. Identifying the people who died of cancer and the children with congenital malformations was the prime interest and concern, not only of the AEC scientists, but also of the Department of Health; the Victims Association; the Nuclear, Biological and Chemical (NBC) Protection Society; the Nuclear Science and Technology Association (NUSTA); and the free press.

The number of cancer deaths and the number of congenital malformations in this article are the numbers reported in the official AEC technical reports that are referenced. We agree that a proper epidemiological study should be carried out, and we advocate this in the abstract and in the recommendations. We recognize that it would be a major exercise; however, we disagree with Dr. Wakeford that "no reliance can be placed upon the results." The scientists who conducted the AEC research program saw no evidence of serious bias, such as age or income distribution. There was no conflict of interest or incentive for bias in collecting the data. So, although we are strongly in favor of an extensive epidemiological study, there is no evidence to suggest that the current data are biased in any way. Postulating a bias toward young adults would also imply a greater number of children and an increase in the expected and predicted congenital malformations.

Thus, the authors have provided information, references, and discussion on the "all-important issues" that Dr. Wakeford cites. And, although Dr. Wakeford apparently questions the expertise and abilities of Taiwanese AEC scientists to correctly identify and study the affected population, he presents no evidence to support his opinion. Dr. Wakeford also presents no evidence to support his "realistic conclusion" that "the great majority of [cancer] cases were missed."

Dr. Wakeford also questions the method of average dose calculation. The article explains the calculations and points out that they are crude, but adequate. In predicting health effects, accurate dose calculations are important only if the LNT hypothesis is employed. But the LNT hypothesis is fundamentally incorrect, and most radiation biologists acknowledge this.1,2 There is considerable scientific evidence that living organisms respond in a nonlinear manner when they receive a low radiation dose or a low dose rate.3,4 There is even evidence that a very small conditioning dose – only 1 mGy of gamma radiation – is all that is needed to cause a strong adaptive response.⁵ Significant biopositive effects appear when radiation levels increase

above ambient.⁶ This evidence is being ignored because of antinuclear political activity by prominent scientists⁷ and other nonscientific considerations. This is unfortunate because low doses of radiation can be used to treat a host of very serious illnesses by stimulating our damage-control biosystem.⁸⁻¹¹ The potential for helping many patients is enormous.

Two competent physicians subjected the article to double-blind peer review, and every comment and question was addressed to their satisfaction. Subject-matter specialists carried out additional reviews, and their comments were also incorporated into the final article.

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Erratum: The abscissa was incorrectly labeled in Fig. 2 in Chen et al., *J Am Phys Surg* 2004;9:9. The correct units are mGy/y:

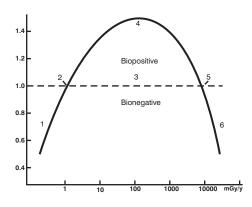


Figure 2. Idealized Dose-Response Curve. The ordinate indicates approximate responses compared with the controls. The abscissa suggests mammalian whole-body exposures as mGy/y. The numbered areas are (1) deficient, (2) ambient, (3) hormetic, (4) optimum, (5) zero equivalent point, and (6) harmful.

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