Interview with Stanford Researcher John Astin, PhD

By Editorial Staff

Editor’s note: John Astin, PhD, is with the Stanford University Center for Research in Disease Prevention. The genesis of this interview was Dr. Astin’s paper, "Why Patients Use Alternative Medicine: Results of a National Study," published in the May 20, 1998 Journal of the American Medical Association.

With various forms of alternative medicine. For example, the Eisenberg study in 1993 reported that 34% of adults in the United States have used at least one “unconventional” form of health care during the previous year. The reasons behind the use of alternative procedures are not clearly understood.

Through written survey, Dr. Astin examined possible predictors of alternative health care including health status, attitudes toward conventional medicine and demographics. The top four treatment categories were chiropractic (15.7%); lifestyle diet (8%); exercise/movement (7.2%); and relaxation (6.9%). Chiropractic was listed as being the first or second most frequently used form of care for severe headaches (1st), sprain/strains (1st), arthritis (2nd) and chronic pain (2nd). The interview that follows provides insight into Dr. Astin’s observations regarding alternative health care.

Dr. Cleveland: Dr. Astin, as a graduate from University of California at Irvine, with a PhD in health psychology, how do you describe the discipline of health psychology?

Dr. Astin: It is the study of the role of psychological factors in health and illness. It includes such things as lifestyle behaviors, coping with stress, the effects of mood states on immune function, as well as how people respond to illness. It is the academic discipline that examines the interface, if you will, between mind and body, and is purportedly the fastest growing discipline within psychology.

Dr. Cleveland: How did you become interested in the topic of alternative medicine?

Dr. Astin: My personal interests have centered for many years around the relationship of mind and body. I had also experimented myself with a number of alternative therapies and found that my academic interests in health psychology dovetailed nicely with the study of alternative medicine. My review of the literature indicated that the factors underlying people’s decision to use alternative therapies had not been extensively researched. This project then became my PhD thesis.
Dr. Cleveland: Then this paper in JAMA was an actual outcome of your PhD thesis?

Dr. Astin: As you may know, a call for papers regarding the area of alternative medicine has been issued for all the AMA journals (including JAMA and Archives of Internal Medicine). This is in response to a survey of AMA members indicating that alternative medicine was among their top areas of interest.

Dr. Cleveland: What accounts for the medical profession’s interest in alternative therapies?

Dr. Astin: There is probably some basic intellectual interest. As indicated in my study, it was the most highly educated who were more likely to use alternative therapies. There is also the awareness now that large numbers of patients are using these therapies and a corresponding professional need or responsibility for physicians to understand what it is their patients are doing. A more cynical interpretation is that the interest stems from some feelings of threat. With 40% of patients using alternative care, it probably gets into a kind of turf war for some physicians who subsequently view the phenomenon as a negative development. Some physicians, maybe due to such feelings of threat, unfortunately take a rather unscientific approach to alternative medicine, one that presumes or assumes they could never have any real validity or efficacy.

Dr. Cleveland: How do you define alternative medicine?

Dr. Astin: I essentially follow Eisenberg and colleagues’ definition as those practices “neither taught widely in U.S. medical schools nor generally practiced in U.S. hospitals.” It is interesting that you ask that question as I believe these definitional issues are very relevant to your own profession. I often use chiropractic as an example of the difficulty and ambivalence around what therapies should be considered “alternative.” I actually debated whether to exclude chiropractic as an alternative (particularly for treating certain conditions) since the survey revealed that 50% of patients with back problems reported using chiropractic to treat that condition. This finding certainly suggests that chiropractic care has become less and less alternative and more what people consider standard care for back pain.

This is a difficult issue. There are many ways to determine which therapies are or are not “alternative.” For example, some want to make the cut based on which therapies are evidenced-based versus which are not, but that becomes complicated because as we know, a considerable amount of conventional medical practice is not evidenced-based.
**Dr. Cleveland:** In your estimate, what proportion of conventional medicine would not be evidenced-based?

**Dr. Astin:** Part of that depends on how you define evidence based. If you consider the randomized controlled trial (RCT), there is an enormous amount of conventional medicine that cannot be ethically or practically tested by RCTs. You cannot ethically perform sham surgeries to know if there is a true treatment effect. This is a very complicated issue, because on the one hand a lot of alternative medicine is being held to the RCT gold standard, which doesn’t hold for a lot of how medicine is actually practiced. Any good health care must be tailored to the individual patient. But RCTs are not typically tailored to the individual but rather attempt to test an intervention that is systematically applied in the same way across a group of individuals. Evidence is critical, of course, but the debate becomes what qualifies as good enough evidence. It is too limiting to say that the RCT is the only irrefutable evidence.

**Dr. Cleveland:** If not RCTs, then outcome studies?

**Dr. Astin:** That is certainly a good option. Sometimes you have to look at outcomes-based research that is occurring in a natural setting rather than the more contrived or controlled setting. One of the problems with the RCT is that essentially you attempt to control extraneous variables, but these are often the very same variables that are operating in the real lives of patients. Therefore, one can question how externally valid the tightly controlled RCT or experiment really is.

**Dr. Cleveland:** You indicated that in one survey of patients with back pain, slightly over 50% utilized chiropractic services. Given that degree of utilization, would chiropractic then not be considered alternative?

**Dr. Astin:** I think one could make that argument. At least with this study that found over 50% of patients with back problems had used chiropractic, it would be difficult to call that treatment "unconventional." It is, however, alternative from the standpoint of not being a truly integrated or accepted part of the dominant, political medical system in this country. Based on how it is viewed from both the public’s and conventional medicine’s perspective, it is probably the least alternative of those therapies that show up on lists of alternative medicine.

**Dr. Cleveland:** In what way might your findings in your study be used to affect future health care policy?

**Dr. Astin:** I don’t know that the findings would directly affect policy. I would say, however, that part of policy is understanding the attitudes and beliefs of the constituents affected by that policy. One of the strongest findings from the study is an apparent shift of attitudes and beliefs regarding the nature of health
and illness. This is reflected in the literature being read by the society. Books on mind-body relationships and holistic health top the best seller lists.

There is certainly a strong relationship between a particular philosophical orientation toward health and life and use of alternative medicine. Having an appreciation for or understanding about certain beliefs and attitudes held by the public and what they think about health is important. The attraction to alternative therapies, as the study suggests, stems in part from the feeling that these therapies share an appreciation for the role of non-physical factors in health and illness. I don’t see a direct policy outcome from this particular study, but probably more from studies examining the efficacy of these therapies. As the efficacy (or lack thereof) is demonstrated scientifically, then policy needs to change to reflect that.

**Dr. Cleveland:** In the conclusion of your study, you indicate that alternative medicine users are more educated, that the majority are not dissatisfied with conventional medicine, and that they are choosing this approach, "...largely because they find these health care alternatives to be more congruent with their own values, beliefs, and philosophical orientations toward health and life." How do you describe that philosophical orientation?

**Dr. Astin:** It centers around two areas. First, there is a strong association between what I refer to as a holistic orientation (a belief in the importance of body, mind and spirit in health) and use of alternative medicine. This is not surprising given the more holistic philosophies underlying many of the alternative therapies. Second, significantly greater use of alternative medicine was observed in a segment or subculture of the population characterized by the following values: a commitment to environmentalism, feminism, interest in personal growth psychology and esoteric spiritual pursuits, and an openness to things foreign and exotic. Among these individuals, a group sociologist Paul Ray refers to in his research as the "cultural creatives." 55% used alternative health care.

**Dr. Cleveland:** The 1993 Eisenberg study has made us aware of the extent of the use of alternative therapies in the United States. What impact has this had for the conventional health care system?

**Dr. Astin:** In many ways it was a kind of wake-up call, one that documented just how big a phenomenon use of alternative medicine really is in our culture. It also served to fuel much of the subsequent scientific interest in these therapies, which has been extremely useful.
**Dr. Cleveland:** Given the new awareness and public interest in alternative health care, do you have any comment or advice to the chiropractic profession with respect to defining itself as part of the changing health delivery system?

**Dr. Astin:** In the same way that I argue that it is important for conventional practitioners to understand what alternative procedures their patients are using and why, the DCs also need to understand the beliefs, attitudes, and health practices of their patients. And this includes what types of alternative approaches they are utilizing and for what reasons. That’s an important piece of information that any practitioner should have.

**Dr. Cleveland:** Thank you, Dr. Astin, for being part of this interview.

*Editor’s note:* Individuals may obtain reprints of the *JAMA* publication at the following address:

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