

Patterns of Acupuncture Use: Highlights from the National Health Interview Survey

By Adam Burke, PhD, MPH, LAc¹ and Dawn M Upchurch, PhD²

Growing Interest in Acupuncture

Recent surveys examining use of complementary and alternative medicine (CAM) in the United States show it to be an important resource both for personal healthcare and maintaining well-being (Barnes et al, 2004; Eisenberg et al, 1998; Tindle et al, 2005). Findings report use to be common in the general public as well as with individuals managing complex, chronic health conditions, such as pain (Quandt et al, 2005), cancer (Deng & Cassileth, 2005), or HIV/AIDS (Standish et al, 2001). Among the provider-based CAM therapies, acupuncture has gained significant attention from consumers, the media, and other health professions. There are now estimated to be over 16,000 non-MD licensed acupuncturists in the US, and an additional 6,000 allopathic physicians who have received training (Dower, 2003). Acupuncture is being adopted as an important modality in integrative healthcare contexts including oncology (Deng & Cassileth, 2005) and pain management (Berman et al, 2004). Public health programs for drug treatment and HIV-care are also prevalent (Sommers & Porter, 2004). Acupuncture has been recognized by the NIH as a useful treatment for a variety of health conditions (Acupuncture, 1997). It is an important area of funded research, with thousands of references on acupuncture-related research found in the PubMed index. Despite the importance of acupuncture as a CAM modality there is an incomplete picture of who is using acupuncture and for what ends. For this reason an analysis was conducted of the 2002 National Health Interview Survey (NHIS) data. The goal of the analysis was to better understand user demographics, medical conditions treated, and satisfaction with use from the perspective of a representative national sample. The results reported here are a distillation of a forthcoming article in *Journal of Alternative and Complementary Medicine* (Burke et al, 2006).

The National Health Interview Survey (NHIS)

The NHIS is conducted periodically to gather information on health behaviors, health status, and use of healthcare services in the US. Information is collected from a representative cross-sectional sample of households. Interviews are conducted in-person and carried out in several languages.

In 2002, the Alternative Health/Complementary and Alternative Medicine supplement was administered. The supplement collected information on 27 types of CAM therapies commonly used in the US including 10 provider-based therapies, such as acupuncture, massage, and chiropractic, and other CAM therapies including use of yoga, prayer, and meditation (Barnes et al, 2004). The supplement did not ask questions about other specific aspects of East Asian Traditional Medicine, such as moxa, tui na, or associated herbal therapies (although information about use of several individual herbs, some of which are part of this tradition, was obtained). It did, however, include a question related to qi gong and to tai chi.

'Recent Use' of acupuncture (in the previous 12 months) was chosen as the primary outcome measure for analysis. From a list of 73 possible conditions, recent users were asked about the role of acupuncture in health maintenance, if they had insurance coverage, if they spoke with a conventional healthcare provider about use, and what it was used for, and whether they used it in an alternative or complementary fashion. The final sample used for the results presented here was N=30,278.

Sociodemographic Characteristics of Individuals Using Acupuncture

The sample, by design, was reflective of the US adult population in 2002. Approximately 4% of the sample reported lifetime use of acupuncture (1266 respondents representing approximately 8 million adults). Recent use was reported by 1.1% of the sample (327 respondents representing 2 million adults). Recent use of acupuncture (within the previous twelve months) ranged from less than 1% for individuals with 12 years of education or less to approximately 3% for Asian females. Overall results suggested that individuals who used acupuncture in the previous twelve months were more likely to be: Asian women (relative to percentage within population), more educated (some college or college graduate), living in the Northeast or West (this is where the majority of acupuncture schools and practitioners are located), former smokers, and those reporting a lower health status.

Treatment Characteristics

Recent users were asked about their use of acupuncture treatment for specific health conditions. The majority (over 80%) said

they used acupuncture to treat a specific condition. They were presented a list of 73 health concerns. Of the top 10 conditions reported by the respondents 7 were either musculoskeletal or pain-related (Table 1). Back pain was the most commonly mentioned reason for seeking acupuncture. The majority used acupuncture to treat one condition, and commonly received 2-4 treatments for that condition. Respondents typically reported that acupuncture was helpful in treating their health concern, as well as being important in maintaining well-being.

Table 1 – Top 10 Conditions Treated

Back pain
Joint pain or stiffness
Neck pain
Severe headache
Recurrent pain
Allergies
Arthritis/Gout/Lupus/Fibromyalgia
Depression/Anxiety
Joint/Bone injury
Sleepiness

(From Burke et al, 2006)

Healthcare Service Characteristics

Use of acupuncture as a complementary therapy (in conjunction with conventional western medicine) was the most common reported usage. There were, however, a significant number of individuals who stated that they were using acupuncture as an alternative treatment because conventional medicine could not help them with their condition. The majority had mentioned their use of acupuncture to a conventional medical professional, and over a quarter reported that a conventional medical professional had recommended acupuncture to them. About 60% said their acupuncture services were not reimbursed by insurance.

Conclusions

Although the prevalence of acupuncture use in the United States is low, it does suggest that millions of Americans are using acupuncture in a variety of ways, often in conjunction with conventional medical care. Low use is due undoubtedly to a complex array of factors including provider availability as well as consumer attitudes regarding what acupuncture can treat and the ways taken to seek out these services. If the goal is to increase access to acupuncture care then a variety of state and national initiatives could help support this outcome. Access to care would be helped by greater

provider availability. To this end the profession could work on increasing its presence in the growing field of integrative medical practice. Several surveys have found that acupuncturists want more career opportunities in conventional healthcare settings, including public health settings (Burke, 2003; Burke et al, 2005). Considering that the majority of patients using acupuncture are using it in conjunction with conventional medicine, greater involvement in conventional institutional settings would benefit both consumers and integrative care professionals. Increasing professional access to the existing healthcare infrastructure could be advanced by educational equivalence with other health professions via a national entry-level doctorate. Attracting and retaining professionally-oriented students and providing high quality competency-based education would also support this aim. Professional advocacy for universal insurance coverage is another key to patient access. Evidenced-based findings of efficacy and of the possible economic benefits of East Asian traditional medicine would provide a rationale for increased insurance coverage. For this reason the profession's support of and participation in research is essential, including advocacy for

changes in methodology which more accurately evaluate the true clinical practice of the medicine (Burke, 2006; Kuo et al, 2006). Ultimately, none of this will be possible if the profession is divided. Essential to success is a commitment to professional unification and the advancement of a common vision which supports consumer health and well-being and a more holistic approach to life based on the wisdom of this ancient tradition.

Acknowledgements

The authors gratefully acknowledge their co-authors in the original manuscript, Claire Dye and Laura Chyu, for their substantial contributions.

References

- Acupuncture. NIH Consensus Statement. 1997 Nov 3-5; 15(5):1-34.
- Barnes PM, Powell-Griner E, McFann K, Nahin RL. Complementary and alternative medicine use among adults: United States, 2002. Hyattsville, MD: National Center for Health Statistics. Adv Data 2004;343: 1-19.
- Berman BM, Lixing L, Langenberg P, et al. Effectiveness of acupuncture as adjunctive therapy in osteoarthritis of the knee: A randomized, controlled trial. Ann Intern Med 2004;141: 901-10.
- Burke A. International reflections on the conduct of acupuncture research. The American Acupuncturist, Spring 35, 12-14, 2006.
- Burke A. State of OM-Shaping our professional future: Expo participant feedback. The CSOMA Source, 3(2), 20-21, 2003.
- Burke A, Morris W, Bruno G, Christensen R, Anders C. AAOM President's Roundtable Summary Report. The American Acupuncturist, Spring 32, 28-30, 2005.
- Burke A, Upchurch D, Dye C, Chyu L. Acupuncture use in the United States: findings from the National Health Interview Survey. Journal of Alternative and Complementary Medicine, 12(7), 2006.
- Deng G, Cassileth BR. Integrative oncology: complementary therapies for pain, anxiety, and mood disturbance. CA Cancer J Clin 2005;55:109-16.
- Dower, C. Acupuncture in California. San Francisco, CA: UCSF Center for the Health Professions; April 2003. Online document at www.futurehealth.ucsf.edu/pdf_files/acupuncture%20issue%20brief.pdf Accessed on February 3, 2006.
- Eisenberg DM, Davis RB, Ettner SL, et al. Trends in alternative medicine use in the United States, 1990-1997: Results of a follow-up national survey. JAMA 1998;280:1569-75.
- Kuo TY, Christensen R, Gelberg L, Rubenstein L, Burke A. Community-research collaboration among academicians and acupuncturists: integrating a participatory research approach in a statewide survey of licensed acupuncturists in California. Ethnicity and Disease (special issue), Winter 16, 98-106, 2006.
- Quandt SA, Chen H, Grzywacz JG, et al. Use of complementary and alternative medicine by persons with arthritis: results of the National Health Interview Survey. Arthritis Rheum 2005;53:748-55.
- Sommers B, Porter K. Acupuncture: Part of the Public Health Equation. Acupuncture Today March 2004;5:3. Online document at www.acupuncturetoday.com/archives2004/mar/03portersommers.html Accessed on February 2, 2005.
- Standish LJ, Greene KB, Bain S, et al. Alternative medicine use in HIV-positive men and women: demographics, utilization patterns and health status. AIDS Care 2001;13:197-208.
- Tindle HA, Davis RB, Phillips RS, Eisenberg DM. Trends in the use of complementary and alternative medicine by US adults: 1997-2002. Altern Ther Health Med 2005;11:42-9.
- Affiliations: 1Institute for Holistic Healing Studies, San Francisco State University, San Francisco, CA. 2UCLA School of Public Health, Los Angeles, California.

Contact Information for Corresponding Author:

Adam Burke, PhD,
Institute for Holistic Healing Studies
Department of Health Education, HSS327
San Francisco State University
1600 Holloway Avenue
San Francisco, CA 94132

Japanese-American Acupuncture Foundation



**Audiotapes / Books
Videotapes / Workshops**
MIKI SHIMA O.M.D., L.Ac.
21 Tamal Vista Blvd., Suite 110
Corte Madera, CA 94925
415.924.5223(JAAF)
Fax: 415.924.5072
www.jaaf.org