The Essential Role of Acupuncture, Herbs and Related Therapies in HIV Care

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HIV Morbidity and Mortality

HIV/AIDS is one of the world's most important contemporary public health problems. According to a UNAIDS report, the international HIV/AIDS rates for the year 2004 were an estimated 39.4 million people currently living with HIV/AIDS, 4.9 million newly infected, and 3.1 millions deaths attributed to the disease (UNAIDS, 2004a). In Sub-Saharan Africa, where AIDS is now the number one cause of death, there are currently 25.4 million adults and children living with AIDS (UNAIDS, 2004b). Health officials are now expressing concern for the regions of Southeast Asia and India where the epidemic is spreading among large, vulnerable populations. The toll on the resources of developing countries is significant in terms of economic productivity, health care expenditures and socio-political stability (UNAIDS, 2004c). Compared with five years ago, the epidemic is also increasingly affecting women and girls, who now comprise half of all people living with HIV (UNAIDS, 2004a).

In the United States there was a rapid increase in AIDS cases and deaths during the 1980s, reaching a high of 150,000 new cases per year. By the late 1990s, these numbers had declined significantly to only approximately 40,000 new cases per year (Valdiserri, 2003). Beginning with the first reported case of AIDS to the year 2003, there have been an estimated 929,985 diagnosed cases and 524,060 deaths in the United States (CDC, 2003). It is estimated that between 850,000 and 950,000 persons in America are currently HIV positive, including 230,000 who do not know they are infected (Fleming et al, 2002; Valdiserri, 2003). Although initially a disease of white men, today AIDS primarily affects racial/ethnic minorities, with African Americans accounting for 50% of new HIV/AIDS cases in 2003. Between 2000 and 2003, diagnoses of HIV/AIDS increased for both male-to-male sex (MSM) partners and heterosexual adults. In 2003, 45% of new cases were MSM and 34% were heterosexual contact. New cases decreased during this period for injecting drug users (IDUs). From 1999 through 2003, there was an estimated 15% increase in AIDS cases among females and 1% among males (CDC, 2003).

HIV and HAART

During the period 1996-1997, a notable decline in both AIDS incidence and mortality was reported in the U.S. indicating success with new treatment regimens. One of the reasons for the dramatic change was the advent of new pharmacological treatments using highly active antiretroviral therapies (HAART). The rate of deaths dropped 49% among individuals involved in male-to-male sex, and for injecting drug users there was a 45% decline among men and 33% among women. Deaths for all racial/ethnic populations declined, as did deaths for women (32%) (CDC, 1998). These medications have changed the nature of HIV, transforming it from an essentially fatal illness to one with significantly improved prospects for survival. For example, data from a New York study of 700 HIV positive individuals reported a 50% reduced risk of mortality due to HAART drugs with populations that traditionally had poor access to high quality health care (Messeri, 2003).

HAART Side Effects

Unfortunately, the successful use of HAART therapy is complicated by several factors. AIDS patients often receive numerous drugs for treatment and adverse reactions are common. They must deal with side effects, drug interactions, accumulated toxicity, drug intolerance and the potential to develop drug-resistant viral strains. HIV-infected individuals are also more susceptible to adverse reactions to various drugs used in treatment than are non-HIV patients. Numerous metabolic disorders have been reported in a significant proportion of patients receiving HAART drugs, including hypertriglyceridemia, insulin resistance, hypercholesterolemia, elevated fasting glucose and diabetes. All of these disorders may predispose patients to coronary heart disease (Fantoni et al, 2003).

Quality of Life

Despite improved therapies and reduced mortality, HIV-infected individuals still deal with a host of issues that affect and challenge their well-being. One study examining gay men in four industrialized countries found that respondents were generally not optimistic in spite of new drug therapies. This finding was independent of their HIV status (International Collaboration on HIV Optimism, 2003). Nilsson-Schonnesson (2002) suggests that the issues facing HIV-infected individuals are quite similar to pre-HAART concerns. According to an NIH panel on clinical practices for the treatment of AIDS, the ideal treatment goals should include the optimal suppression of viral load, restoration of immune function, reduced HIV-related morbidity and mortality, and improved quality of life (Dybul et al, 2002). Data suggests that important predictors of quality of life for HIV positive populations include the impact of symptoms, drug treatment, social support, spiritual well-being, coping strategies and psychiatric co-morbidities (Douaihy & Singh, 2001).

One study examined four QOL factors – physical, social role, functioning and fatigue. Severe pain was associated with lower QOL on all four measures (Vosvick et al, 2003). Pain has also been associated with increased depressive symptoms in HIV patients (Singer et al, 1993). In the HIV Cost and Services Utilization Survey 2,836 respondents were

assessed for physical and role functioning. Limitation in complex roles, such as employment, was more prevalent than in specific physical tasks. A French study surveying 887 HIV patients found fatigue and gastro-intestinal problems to be the most frequently cited complaints (Bertholon, Roser and Korsia, 1999). Fatigue was also found to be related to depressive symptoms independent of AIDS diagnosis and medication status (Millikin et al, 2003). One report by Sullivan and Dworkin (2003) abstracted 13,768 medical records on HIV patients in over 100 U.S. clinics. They found that fatigue persistent or severe enough to prevent work was reported by 35% of patients as the primary cause of medical visits. Fatigue was more common among individuals with clinical AIDS, anemia or depression.

The Growth of Complementary and Alternative Medicine (CAM)

Complementary and Alternative Medicine (CAM) use continues to be a significant part of consumer health seeking behavior in the US. The recent 2002 National Health Interview Survey (NHIS) provided interview information from over 31,000 adults. It reported that 36% of the respondents used CAM during the past 12 months. That figure rose to 62% if prayer used for health purposes was included in the definition of CAM (Barnes et al., 2004). Annual out-of-pocket expense for CAM products and services is estimated to exceed $27 billion (IOM, 2005). In addition to use by the general public, individuals dealing with complex and serious health problems, such as cancer, chronic pain and other complex conditions must manage a variety of troubling symptoms, side-effects from toxic drug therapies, ineffective treatments, desire for more diverse treatments, and other concerns. Cancer patients report high use of CAM products and services (Bernstein & Grasso, 2001; Dy et al, 2004; Henderson & Donatelle, 2004). Chronic pain is another condition highly associated with CAM use (Rao et al, 1999; Sherman et al, 2004). One study observed highest use among patients with osteoarthritis, fibromyalgia and severe pain. Ineffectiveness of prescription medications was reported as a significant reason for CAM use by almost half of these respondents (Rao et al, 1999). With certain conditions, such as fibromyalgia, no successful western medical treatment currently exists and prognosis is generally poor, motivating patients to pursue other options such as CAM (Kennedy & Felson, 1996; Ledingham, Doherty & Doherty, 1993). CAM treatments for pain conditions include acupuncture, mind-body therapies, exercise, relaxation, cognitive behavioral therapy, manipulative therapies, biofeedback and neurofeedback (Berman & Swyers, 1997; Berman & Swyers, 1999; Buckelew et al., 1998; Sim & Adams, 1999, 2002; Wright & Sluka, 2001).

CAM and HIV

Individuals dealing with HIV-related health problems must similarly address numerous issues, such as drug side-effects, pain and depression. These problems may be symptoms of the illness or result from the use of Western medications which may not be well tolerated. This can make the use of CAM a desirable alternative therapy. One survey of 180 HIV patients found that 68% used herbs, vitamins and supplements; 45% used CAM providers; and 24% used marijuana to manage weight loss and other symptoms. Patients using CAM providers made an average of 12 visits to those providers versus 7 to their primary care providers. The majority of respondents reported CAM to be very helpful in addressing their needs (Fairfield et al, 1998). One large national CAM survey conducted with HIV positive men and women reported use of 1,600 different types of CAM therapies, substances and providers. The most commonly used CAM providers were massage therapists (49%), acupuncturists (45%), nutritionists and psychotherapists ((37% and 35% respectively). The most common CAM activities were reported to be aerobic exercise, prayer, massage, needle acupuncture, mediation, support groups, visualization and imagery, breathing exercises, spiritual activities, and other exercise (Standish et al., 2001). Agnoletto et al (2003) found in a sample of 632 HIV-infected subjects from seven European countries that 124 used nutritional substances, and 116 received psychophysiological therapies such as acupuncture. In a review by Wootton and Sparber (2001) it was reported that significant improvement in conventional therapies for HIV has resulted in increasing use of CAM use in conjunction with conventional medical HIV treatment.

Acupuncture and Oriental Medicine and HIV

There is a clear role for AOM and related therapies in the treatment of HIV-infected individuals. AOM is effective in reducing pain, such as neuropathic pain, and improving quality of life (e.g. Abuaisha et al, 1998; Call et al, 2000; Phillips et al, 2004; Usha et al, 2003). Acupuncture has also shown promise in the treatment of insomnia with HIV patients (Phillips and Skelton, 2001). Agnoletto et al (2003) found in a sample of 632 European HIV positive subjects that of CAM methods used, acupuncture was commonly used by patients to treat general malaise. There is increasing evidence that Chinese herbal remedies may have positive immunomodulatory effects and serve as useful co-therapeutic agents in treating HIV infection (Lam & Ng, 2002; Shaw, Lee & Wong, 2005; Usha et al., 2003). Acupuncture and moxa have been found to be promising treatments for chronic diarrhea (Anastasi & McMahon, 2003). Studies on acupuncture and depression have shown positive benefit with response and relapse rates comparable to other validated treatments. Acupuncture plus pharmacological treatment has been shown to produce superior outcomes for depression compared to treatment with drugs alone (Roschke et al, 2000). Indeed there are many areas where AOM can assist individuals with HIV/AIDS to have healthier, vital lives. More funding and research is needed in this important area of HIV care.

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