Acupuncture in Uganda: A Research Letter on the Integration of Acupuncture With Conventional Biomedical Treatments

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INTRODUCTION

The Pan African Acupuncture Project (PAAP) was created in 1996 and is a volunteer-based not-for-profit training organization. It encourages community empowerment and wellness through training local healthcare providers how to use simple, effective acupuncture protocols to treat the symptoms of HIV/AIDS, malaria, tuberculosis, and other chronic conditions. A manual explains the theory of acupuncture and the techniques associated with it in clear and simple terms with specific acupuncture protocols associated with the signs and symptoms of illnesses commonly seen in Uganda. PAAP maintains contact with the trainees to provide ongoing support through: (1) three week-long meetings per year, (2) ongoing contact with the PAAP local coordinator, and (3) electronic communications including email, text messaging, and Facebook communication. A primary focus is to help integrate acupuncture into the local context and current public health system. This is accomplished by working with local governmental and nongovernmental agencies and healthcare facilities to improve access to and effectiveness of care through collaboration with Western and traditional healthcare modalities. The integration of acupuncture and other traditional complementary and alternative medicines (TCAMs) in the international public health sector at the level of local health workers can increase access to treatment in a sustainable manner while also building the confidence and self-worth of the public healthcare practitioners.

PAAP trains local healthcare providers to employ acupuncture protocols as outlined in a treatment manual. PAAP’s acupuncture training consists of 3 weeks of training taking place 1 week at a time, 3 times over 1 year. Each week consists of lectures for 1 to 2 days of the week and clinical supervision for the remaining time with group discussions on difficult cases and questions. The clinical supervisors (trainers) are practitioners educated in the use of the PAAP training manual. Our data was collected in the trainees’ second week of training. Patients were assigned to trainees as they came into the clinic. Trainees first conducted an intake, including administration of a modified version of the Measure Yourself Medical Outcomes Profile (the MYMOP)1 and then performed the needling and/or moxibustion according to the PAAP Manual. Clinical supervision consisted of help locating protocols in the PAAP Manual, help finding acupuncture points, and technique. Patients were left to rest with the needles for 20 to 45 minutes, depending on the trainee’s judgment. Follow-up visits followed the same structure.

Setting

We collected data in Kamwenge and Isingiro, two small towns in Uganda. The lectures and clinical practice were performed at the local health center of each respective town. The space used consisted of two large rooms with approximately 15 beds in total, and there were no partitions between beds. Twenty-five healthcare practitioners came from more rural areas to this central location to receive training for a week. All trainees are nurses or midwives. Trainees are recruited through the local healthcare administrators of various clinics who send one or two employees to the training. During the clinical practice portion of the training, patients are recruited from the community through the healthcare center, radio announcements, and word of mouth. Follow-up was conducted only with patients who returned for multiple treatments. Patients were matched with trainees at random, including in their follow-up visit.

DATA COLLECTION

The MYMOP is a patient-centered outcome questionnaire, first published in BMJ in 1996.1 Originally designed to measure the effects of complementary and alternative medicine (CAM), use of this evaluation tool in primary care has become popular in both biomedicine and CAM settings. We chose items from the MYMOP and asked patients to report and rate two symptoms that were the most bothersome, rating symptom severity and symptom change. The trainee gained skill using this new intake and the MYMOP on the first day of their week long training, and much of the form was clarified during clinical practice. The trainee usually filled out the MYMOP and the questions were asked out loud by the trainee in the local dialect as most of the patients were illiterate.

DATA ANALYSIS

All data were de-identified by one of the trainers before analysis. The New England Institutional Review Board (www.neirb.org) oversaw the analysis. Data were first analyzed for descriptive demographic information on the patient sample. SPSS (IBM Corp, Armonk, New York) was used to conduct a paired sample t-tests.
RESULTS

PAAP assessed and collected data on 117 patients who received 153 acupuncture treatments at Isingiro over the course of four days (4/17/12–4/20/12). An additional patient received one acupuncture treatment at Kamwenge (4/26/12). Patients were not necessarily assessed by the same practitioner on return visits but were always treated using the same treatment protocol from the manual. The ages of the patients ranged from 13 to 80 years with a mean age of 43 years. Thirty-three percent of patients were male; 67% were female, one of whom was pregnant.

Patients were asked to provide a brief medical history that contributed to our data collection. Of the patients, 79% claimed to have been HIV tested and a total of 9% reported being HIV positive; however, this percentage may be low as not all patients get their test results. Tuberculosis (TB) was reported in 5% of patients, none of whom were taking medication for TB. Malaria history was reported in 75% of the patients; only 8% were currently diagnosed with malaria and only one patient was taking medications for malaria. Only three patients reported having hepatitis, type unknown. PAAP found that only 38% of patients were taking any Western medicine (Table).

Patients were assessed for specific complaints before and after treatment. Of the main complaints that PAAP reported, 70% were for pain. Primary, secondary, and tertiary complaints are shown in Figure 1. Other conditions for which patients sought acupuncture

| Table: Treatment Sample Descriptive Statistics Including HIV, Tuberculosis, Malaria and Hepatitis Status |
|-------------------------------------------------|
| Gender | Tested for HIV | HIV-positive | Tuberculosis | History of Malaria | Malaria Diagnosis Now | Hepatitis Diagnosis Now | Using Western Medication Now |
|--------|----------------|--------------|--------------|--------------------|----------------------|-------------------------|-----------------------------|
| Both   | 79%            | 9%           | 5%           | 75%                | 8%                   | 3%                      | 38%                        |
| Male   | 26%            | 67%          | 60%          | 26%                | 43%                  |                         | 56%                        |
| Female | 60%            | 22%          | 40%          | 60%                | 43%                  |                         | 31%                        |

Figure 1 Of those patients with the main complaint of pain, descriptive counts of types of pain are illustrated here.
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A 46% improvement in the patients’ symptoms from pre- to posttreatment reached statistical significance (P < .05) using one-tailed paired t-tests. Only patients whose pre and post symptoms were the same were included in the data analysis.

DISCUSSION

There have been numerous governmental and international efforts to revitalize the healthcare system in Uganda since the mid-1980s. However, the lack of trust in government facilities and the now bustling informal healthcare system are structural impediments to change. Integration of TCAMs in any public health system faces numerous challenges. Between 2002 and 2005, the World Health Organization developed a multi-part strategy for maximizing the potential of traditional medicine to be involved in public health. Such integration need be organized at the national level if only to facilitate integration of traditional healers with modern medicine.

Traditional Chinese medicine practitioners’ views of health and illness are similar to those held by Ugandan traditional healers and many others, facilitating acceptance of this modality. Acupuncture works alongside conventional treatment interventions to reduce symptoms and the side effects from medications without risk of interaction from additional medication. In addition, the cost of an acupuncture treatment is extremely low; disposable needles cost about two cents each, and a treatment may use 10 to 25 needles on average. Acupuncture also improves compliance with conventional medical regimens by serving as a gateway to conventional medicine, supporting health management by medical providers, and increasing trust in the public healthcare system.

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Figure 2 Descriptive counts of main complaints for which patients sought acupuncture treatment.

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