Integrated Medicine:

Incorporating Alternative Therapies Safely and Effectively

Primary care providers are increasingly aware of the fact that many patients, while not abandoning conventional medicine, are using alternative methods in conjunction with standard medicine. While this is common practice, many patients do not discuss complementary and alternative medicine (CAM) use with their providers. Some of the reasons a patient may not disclose the use of alternative therapy include that fact that many providers do not ask; a lack of provider knowledge of alternative medicine; and patients’ perceived negative reaction by the physician.

To provide the best quality care, health literacy in patients must be matched with the cultural competency and knowledge of the provider. Open and nonjudgmental questioning of patients may help increase a provider’s knowledge of patient use of alternative therapies and lead to improved patient care, as clinicians, patients, and alternative providers can work together toward better health. Moreover, patients using alternative therapy, while also being monitored by their physician, will feel that they have been “listened to” in a safe environment.

MCN is sponsoring an intensive session on Integrated Medicine at the 2004 National Farmworker Health Conference. This day-long session will provide participants with important skills, knowledge, and strategies to understand the role of alternative medicine for their patients.

The session will be moderated by a practicing clinician with experience in integrating alternative medicine into primary care. The presenters include Dona Enriqueta, a Zapotecan midwife with over 45 years of experience using traditional medicine. Dona Enriqueta will assist clinicians in understanding the health belief of Oaxacan patients and link them to strategies they might employ in increasing their role in self care. Amitava Dasgupta is a specialist in laboratory medicine who will lead a practical discussion of the use of common herbal medicine and common drug-herb interactions. A summary of some of Dr. Dasgupta’s key work is presented in this issue of Streamline. Deliana Garcia will present a review of current research on the use of alternative therapies. Larry Li will lead a discussion on the practicalities of incorporating integrative medicine in a migrant/community health center. The session will include cultural competency simulation exercises, small group discussion and interactive case studies.

If you are interested in attending this intensive session we ask that you complete the enclosed card and mail it back to MCN. Space is limited so send your registration in now! For more information about the overall conference registration please refer to the National Association of Community Health Centers website, www.nachc.com or call them at (301) 347-0400.
Review of Abnormal Laboratory Test Results and Toxic Effects Due to Use of Herbal Medicines

Amitava Dasgupta, PhD

Editor’s Note: The following article excerpts critical information from Dr. Dasgupta’s recent article in the American Journal of Clinical Pathology on drug-herb interactions. We are privileged to have Dr. Dasgupta speak at the upcoming 2004 National Farmworker Health Conference at the day-long intensive on alternative therapies Thursday April 29th in Key Biscayne, Fl. If you are interested in learning more from Dr. Dasgupta and our other distinguished speakers, please fill out the enclosed card and mail it back to MCN.

Herbal medicines are used widely in the United States, and according to a recent survey, the majority of people who use herbal medicines do not inform their physicians about their use. Herbal medicines can cause abnormal test results and confusion in proper diagnosis. Herbal medicines can alter test results by direct interference with certain immunoassays. Drug-herb interactions can result in unexpected concentrations of therapeutic drugs.

Herbal medicines, including Chinese herbal products, are readily available in the United States from health food stores without prescriptions. Ayurvedic medicines are used widely in India, and some preparations are available in the United States. Ginseng, St John’s wort, ma huang, kava, ginkgo biloba, Dan Shen, feverfew, garlic, ginger, saw palmetto, comfrey, pokeweed, hawthorn, dong quai, and cat’s claw are used by the general population in the United States. Intended uses of common herbal medicines are given in Table 1. Gulla et al published a survey of 369 patient-escort pairs and reported that 174 patients (47.2%) used herbs. The most common herbal product used was ginseng (20%) followed by echinacea (19%), ginkgo biloba (15%), and St John’s wort (14%).

Herbal products do not fall under the category of drugs as long as they are not marketed for the prevention of any diseases, and FDA approval is not needed. Herbal products are classified as “dietary supplements” and are marketed pursuant to the Dietary Supplement Health & Education act of 1994.

Effect of Herbal Medicines on Clinical Laboratory Testing

Abnormal laboratory test results due to the use of herbal medicines can be classified in three categories:

1. Abnormal test results due to direct interference of a component of the herbal medicine with the assay
2. Unexpected concentration of a therapeutic drug due to drug-herb interactions
3. Abnormal test results due to toxic effects of the herbal product

Abnormal Drug Concentrations Due to the Use of Herbal Medicine

Several herbal medicines lower the seizure threshold maintained by phenobarbital, offsetting the beneficial anticonvulsant activity. Evening primrose oil contains gamolenic acid that lowers the seizure threshold maintained by several anticonvulsants. Borage oil (starflower) also contains gamolenic acid. Shankhapushpi, an ayurvedic medicine for epilepsy, has adversely affected the effectiveness of phenytoin.

Warfarin is an anticoagulant with a narrow

Table 1 - Intended Uses of Common Herbal Medicines

<table>
<thead>
<tr>
<th>HERBAL MEDICINE</th>
<th>INTENDED USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ginseng</td>
<td>Tonic capable of invigorating users physically, mentally, and sexually; also used for dealing with stress; used in China for more than 3,000 years</td>
</tr>
<tr>
<td>Siberian Ginseng</td>
<td>Similar to ginseng</td>
</tr>
<tr>
<td>St. John’s Wort</td>
<td>Treatment of mood disorders, particularly depression</td>
</tr>
<tr>
<td>Ginkgo biloba</td>
<td>Mainly to sharpen mental focus in otherwise healthy adults and also in people with dementia; improvement of blood flow in the brain and peripheral circulation; treatment of diabetes mellitus-related circulatory disorders, impotence, and vertigo.</td>
</tr>
<tr>
<td>Kava</td>
<td>Relief of anxiety and stress; sedative</td>
</tr>
<tr>
<td>Valerian</td>
<td>Treatment of insomnia</td>
</tr>
<tr>
<td>Echinacea</td>
<td>Immune stimulant that helps increase resistance to colds, influenza, and other infections; wound healing</td>
</tr>
<tr>
<td>Saw palmetto</td>
<td>Treatment of benign prostatic hypertrophy</td>
</tr>
<tr>
<td>Feverfew</td>
<td>Relief from migraine headache and arthritis</td>
</tr>
<tr>
<td>Garlic</td>
<td>To lower cholesterol levels and blood pressure; prevention of heart attack and stroke</td>
</tr>
<tr>
<td>Ginger</td>
<td>Prevention of motion sickness, morning sickness, &amp; nausea</td>
</tr>
<tr>
<td>Cranberry</td>
<td>Treatment of urinary tract infection; decrease kidney stone formation</td>
</tr>
<tr>
<td>Aloe</td>
<td>To heal wounds, burns, skin ulcers; also used as a laxative</td>
</tr>
<tr>
<td>Senna</td>
<td>Laxative</td>
</tr>
<tr>
<td>Dong quai</td>
<td>To alleviate problems associated with menstruation and menopause</td>
</tr>
<tr>
<td>Cat’s claw</td>
<td>Immunostimulant with antiviral activity; also used by people with AIDS; prevention of colds and influenza; treatment of chronic fatigue syndrome</td>
</tr>
<tr>
<td>Hawthorn</td>
<td>For heart failure, hypertension, and angina pectoris</td>
</tr>
<tr>
<td>Pokeweed</td>
<td>Antiviral and antineoplastic; eating uncooked berry or root may cause serious poisoning</td>
</tr>
</tbody>
</table>
therapeutic range. The drug has potentially serious consequences if bleeding complications develop or if a subtherapeutic level occurs, thus failing to protect the patient from thromboembolic events. Several herbs interact with warfarin. The herbs that may increase the risk of bleeding (potentiate effects of warfarin) include angelica root, arnica flower, anise, bogbean, borage seed oil, capsicum, feverfew, garlic, ginger, ginkgo, horse chestnut, licorice root, and willow bark. The herbs with documented interaction with warfarin include Dan Shen, ginseng, Siberian ginseng, Devil’s claw, and dong quai, among others.18

A 47-year-old man with a mechanical heart valve took warfarin for 5 years and had an average international normalized ratio (INR) of 4. Within 2 weeks of using ginseng, his INR dropped to 1.5, but 2 weeks after discontinuing ginseng use, it returned to 3.3. Fortunately, no adverse effects occurred during the 2 weeks with a subtherapeutic INR.19 A subtherapeutic INR due to the intake of soy protein in the form of soy milk also has been reported in a 70-year-old man. INR values returned to normal 2 weeks after discontinuation of soy milk.20 Conversely Dan Shen caused inappropriately increased anticoagulation (INR values ranging from 5.5–8.4) in patients taking warfarin.21,22 Apart from inhibition of platelet aggregation, Dan Shen also promotes fibrinolysis due to antithrombin III-like activities. Dan Shen increases the concentration of warfarin owing to a decrease in clearance.23

Licorice may offset the ability of spironolactones to reduce blood pressure. Licorice is used as an antiinflammatory herb and also as a remedy for gastric and peptic ulcers. Carbenoxolone, one of the components of licorice, can elevate blood pressure and cause hypokalemia.

**Significantly Lower Concentrations of Drugs Due to Concurrent Use of St. John’s Wort**

St. John’s wort is prepared from *Hypricum*, a perennial aromatic shrub with bright yellow flowers. Many chemicals have been isolated from St. John’s wort, including hypericin, pseudohypericin, gueretin, isoxercitrin, rutin, amonitavolave, hyperforin, other flavonoids, and xanthones. Melatonin, a human pineal gland hormone, is also found in St. John’s wort.24 The mechanism of action of St. John’s wort is not well established.25 Several reports describe unexpected low concentrations of certain therapeutic drugs due to concurrent use of St. John’s wort. Use of St. John’s wort resulted in a decrease of trough serum digoxin concentrations by 33% and peak digoxin concentration by 26%.

St. John’s wort reduced the area under the curve of the HIV-1 protease inhibitor indinavir by a mean of 57% and decreased the extrapolated trough by 81%. A reduction in indinavir concentration of this magnitude could lead to treatment failure.26 A case report describes an interaction between St. John’s wort and theophylline.

Fugh-Berman14 and later Fugh-Berman and Ernst15 have written reviews on interactions between herbs and drugs. The most common interactions between herbs and drugs are summarized in Table 3.

**Table 3. Common Drug-Herb Interactions**

<table>
<thead>
<tr>
<th>Herbal Product</th>
<th>Interacting Drug</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ginseng</td>
<td>Warfarin</td>
<td>Ginseng may decrease effectiveness of warfarin</td>
</tr>
<tr>
<td></td>
<td>Phenelzine</td>
<td>Toxic symptoms, eg, headache, insomnia, and irritability</td>
</tr>
<tr>
<td></td>
<td>Paroxetine</td>
<td>Lethargy, incoherence, nausea</td>
</tr>
<tr>
<td></td>
<td>hydrochloride</td>
<td>Decreased AUC; peak and trough concentration of digoxin may reduce effectiveness of digoxin</td>
</tr>
<tr>
<td>St. John’s W</td>
<td>Cyclosporine</td>
<td>Lower cyclosporine concentration due to increased cyclosporine concentration due to increased clearance may cause transplant rejection</td>
</tr>
<tr>
<td></td>
<td>Theophylline</td>
<td>Lower concentration, thus decreases the efficacy of theophylline</td>
</tr>
<tr>
<td></td>
<td>Indinavir</td>
<td>Lower concentration may cause treatment failure in patients with HIV</td>
</tr>
<tr>
<td>Ginkgo biloba</td>
<td>Aspirin</td>
<td>Bleeding; ginkgo can inhibit PAF</td>
</tr>
<tr>
<td></td>
<td>Warfarin</td>
<td>Hemorrhage</td>
</tr>
<tr>
<td></td>
<td>Thiazide</td>
<td>Hypertension</td>
</tr>
<tr>
<td>Kava</td>
<td>Alprazolam</td>
<td>Additive effects with CNS depressants, alcohol</td>
</tr>
<tr>
<td>Garlic</td>
<td>Warfarin</td>
<td>Increased effectiveness of warfarin; bleeding</td>
</tr>
<tr>
<td>Ginger</td>
<td>Warfarin</td>
<td>Increased effectiveness of warfarin; bleeding</td>
</tr>
<tr>
<td>Feverfew</td>
<td>Warfarin</td>
<td>Increased effectiveness of warfarin; bleeding</td>
</tr>
<tr>
<td>Dong quai</td>
<td>Warfarin</td>
<td>Dong quai contains coumarin; dong quai increases INR for warfarin, causes bleeding</td>
</tr>
<tr>
<td>Dan Shen</td>
<td>Warfarin</td>
<td>Increased effectiveness of warfarin owing to reduced elimination of warfarin</td>
</tr>
<tr>
<td>Soy Milk</td>
<td>Warfarin</td>
<td>Causes decline in INR</td>
</tr>
<tr>
<td>Comfrey</td>
<td>Phenobarbital</td>
<td>Increased metabolism of comfrey producing a lethal metabolite from pyrilizidine; severe hepatotoxic effects</td>
</tr>
<tr>
<td>Borage oil</td>
<td>Phenobarbital</td>
<td>May lower seizure threshold, requiring dosage increase</td>
</tr>
<tr>
<td>Evening primrose oil</td>
<td>Phenobarbital</td>
<td>May lower seizure threshold, requiring dosage increase</td>
</tr>
<tr>
<td>Licorice</td>
<td>Spironolactone</td>
<td>May offset the effect of spironolactone</td>
</tr>
<tr>
<td>Shankhaphuspi</td>
<td>Phenytoin</td>
<td>Lower phenytoin level and loss of seizure control</td>
</tr>
</tbody>
</table>

AUC, area under the curve; CNS, central nervous system; INR, international normalized ratio; PAF, platelet-activating factor.
 Unexpected Presence of a Drug in a Patient Who Never Used That Drug: Herbal Medicines Adulterated With Western Medicines

The adulteration of Chinese herbal products with Western drugs is a serious problem. Of 2,069 samples of traditional Chinese medicines obtained from 8 hospitals in Taiwan, 23.7% contained pharmaceuticals, most commonly caffeine, acetaminophen, indomethacin, hydrochlorothiazide, and prednisolone. Nonsteroidal antiinflammatory drugs and benzodiazipines have been found in many Chinese medicines sold outside Asia. These herbs include Miracle-Herb, tung shueh, and Cuifong Toukawan. Heavy metal contamination also was found in herbal products. 24 of 254 Asian patented medicines obtained from herbal stores in California contained lead, 36 products contained arsenic, and 35 products contained mercury.

Abnormal Laboratory Test Results Due to Toxic Effects of Herbal Medicines

Kava-Kava and Abnormal Liver Function Test Results.

Kava is an herbal sedative with a purported antianxiety or calming effect. Kava is prepared from a South Pacific plant (Piper methysticum). The main bioactive compounds include ylangonin, desmethoxyyangonin, 11-methoxyyangonin, kavain, and dihydroxykavain.

Kava can have additive effects with central nervous system depressants. A patient who was taking alprazolam (Xanax), cimetine, and terazosin became lethargic and disoriented after ingesting kava. Kava lactones can inhibit cytochrome P-450 activity and have a potential for interaction with drugs that are metabolized by the liver. Heavy consumption of kava has been associated with increased concentrations of γ-glutamyltransferase. A case in which severe hepatitis was associated with kava use. The patient eventually received a liver transplant. Because of the potential for toxic effects on the liver, the FDA warned the public against the use of kava-kava.

Chaparral and Abnormal Liver Function Test Results.

Chaparral can be found in health food stores as capsules and tablets and is used as an antioxidant and an anticancer herbal product. Leaves, stems, and bark also are available in bulk for brewing tea. Chaparral-associated hepatitis has been reported. A 45-year-old woman who took 160 mg/d of chaparral for 10 weeks sought care because of jaundice, anorexia, fatigue, nausea, and vomiting. The results of liver enzyme and other liver function tests were abnormally high (ALT, 1,611 U/L; AST, 957 U/L; alkaline phosphatase, 265 U/L; g-glutamyltransferase, 993 U/L; and bilirubin, 11.6 mg/dL [198 µmol/L]). Viral hepatitis, cytomegalovirus, and Epstein-Barr viruses were ruled out. Liver biopsy showed acute inflammation with neutrophil and lymphoplastic infiltration, hepatic disarray, and necrosis. Gordon et al[48] reported a case in which hepatitis developed in a 60-year-old woman owing to the use of chaparral for 10 months. Despite aggressive therapy, the condition of the patient deteriorated, and she required orthotopic liver transplantation. Other cases of toxic effects on the liver due to chaparral have been reported. The FDA has warned the public about the dangers of consuming chaparral.

Mistletoe and Liver Damage.

Mistletoe is a parasitic evergreen plant that lives on trees such as oaks, elms, firs, pines, and apple. Mistletoe was used in folk medicine as a digestive aid, heart tonic, and sedative. Mistletoe berries are poisonous. In a 49-year-old woman with nausea, general malaise, and dull abdominal pain, the results of liver function tests suggested hepatitis (ALT, 123 U/L; lactate dehydrogenase, 395 U/L; AST, 250 U/L). Liver biopsy also suggested hepatitis. However, all serologic tests for hepatitis were negative. The patient had drug-induced hepatitis probably due to mistletoe.[49]

Germander and Elevated Liver Enzyme Levels.

Germander has been used as a remedy for weight loss and as a general tonic. Germander tea is made from the aerial parts of the plant and has been in use for centuries. Twenty-six cases of german-der-induced hepatotoxicity have been reported in Europe.

Comfrey and Liver Damage.

The regular use of comfrey is a potential health risk owing to the presence of pyrrolizidine alkaloids. These alkaloids have hepatotoxic effects in animals and humans and also induce tumors in animals.

Chromium and Hypoglycemic Herbs: Abnormally Low Glucose Concentrations.

Athletes and body builders use chromium for improving performance. Chromium is a trace metal that has an effect on the glucose-insulin system. Bunner and McGinnis[50] described a case in which a 29-year-old man was referred to the outpatient neurosurgery clinic because of his unusual behavior at work. The patient had been diagnosed with diabetes mellitus at the age of 20 years and was taking 9 U of NPH insulin (Humulin N) per day. His blood glucose concentrations ranged between 90 and 120 mg/dL (5.0–6.7 mmol/L). During the episode, he was agitated, and admission to the hospital, his blood glucose concentration was 30 mg/dL (1.7 mmol/L). The patient was taking 200 to 300 µg of chromium 2 to 3 times per week for bodybuilding, and the hypoglycemic episode most likely was linked to chromium use. Anderson[51] reviewed the effect of chromium on the glu-

Table 4. Potentially Toxic Herbs

<table>
<thead>
<tr>
<th>Herb</th>
<th>Toxic Effect or System Affected</th>
<th>Intended Use (Should Anyone Use?)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comfrey</td>
<td>Hepatotoxic</td>
<td>Repairing bone &amp; muscle; prevention of kidney stones</td>
</tr>
<tr>
<td>Ephedra</td>
<td>Cardiovascular</td>
<td>Herbal weight loss</td>
</tr>
<tr>
<td>Chan Su</td>
<td>Cardiovascular</td>
<td>Tonic for heart</td>
</tr>
<tr>
<td>Borage oil</td>
<td>Hepatotoxic; hepatocarcinogenic</td>
<td>Source of essential fatty acids; rheumatoid arthritis; hypertension</td>
</tr>
<tr>
<td>Calamus</td>
<td>Carcinogenic</td>
<td>Psychoactive, not promoted in the US</td>
</tr>
<tr>
<td>Chaparrel</td>
<td>Hepatotoxic; nephrototoxic; carcinogenic</td>
<td>General cleansing tonic; blood thinner; arthritis remedy; weight loss product</td>
</tr>
<tr>
<td>Licorice</td>
<td>Pseudoaldosteronism (sodium and water)</td>
<td>Treatment of peptic ulcer; flavoring agent retention, hypertension, heart failure</td>
</tr>
</tbody>
</table>
cose-insulin system in subjects with hypoglycemia, hyperglycemia, diabetes mellitus, and hyperlipidemia. Ginseng, whose activity has been attributed to 2% to 3% ginsenosides, has been associated with hypo- glyceremic properties. Fenugreek, ginger, nettle, sage, and devil’s claw also can affect glucose levels. Karelia has been shown to improve glucose tolerance.\(^4\)

**Licorice-induced hypokalemic myopathy**

Licorice-induced pseudohypokalemia also has been reported.\(^4\) Licorice contains glycyrhizic acid, which inhibits the enzyme 11B-hydroxysteroid dehydrogenase. Therefore, concentrations of cortisol may increase. Renin activity and aldosterone concentrations in serum usually decrease.

**Lead Poisoning Due to Herbs: Abnormal Laboratory Test Results**

Unexpected lead poisoning may occur owing to the use of herbal medicines contaminated with lead.\(^4\) Anderson et al\(^6\) reported a case of lead poisoning in a 23-year-old man with a 5-day history of severe, diffuse abdominal pain, vomiting, and diarrhea followed by constipation. The laboratory investigation showed elevated bilirubin and alanine transaminase concentrations, but the alkaline phosphatase activity was normal. The urinary porphyrin screen was positive, indicating the possibility of acute porphyria. Further investigation showed elevated concentrations of zinc protoporphyrin (145 \(\mu\)mol/L; reference range, <70 \(\mu\)mol/L) and lead (77 \(\mu\)g/dL [3.7 \(\mu\)mol/L]). The patient was taking an herb purchased in India. After discontinuation of the herbal medicine, his blood concentrations of lead and zinc protoporphyrin were reduced significantly.\(^6\)

**Herbal Medicine and Surgery**

The American Society of Anesthesiologists suggested that patients should discontinue their herbal medicines at least 2 weeks before surgery. Ang-Lee at al\(^7\) recommended that garlic and ginseng should be discontinued at least 7 days before surgery because both herbs have been reported to aggravate bleeding. Ginkgo biloba should be discontinued 3 days before surgery because it inhibits platelet aggregation, causing bleeding. Kava should be discontinued at least 24 hours before surgery because kava can increase the sedative effect of anesthetics. Ma huang (ephedra) should be discontinued 24 hours before surgery because ma huang increases the blood pressure and the heart rate. St. John’s wort should be discontinued 5 days before surgery.

**Toxic Effects of Herbal Medicines**

Toxic effects of herbal medicines range from allergic reaction to cardiovascular, hepatic, renal, neurologic, and dermatologic toxic effects. Although ginseng is considered safe, the toxicity of ginseng has been reported in the literature. See Table 4 for common toxic reactions to herbal medicine.

Please contact MCN for a full list of references for this article, jhopewell@migrantclincian.org or 530-345-4806

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**What’s Happening with HepTalk?**

Kath Anderson

Imagine three people in a small room. One is a clinician, one is a sick child, and the other is the mother of the child. The clinician has examined the child and diagnosed flu, but knows that several cases of Hepatitis A have recently been seen at the clinic. She wants to have a discussion with the mother about the risks she and her child are facing, but she looks at the woman and reads tiredness in her face, anxiety and withdrawal in her posture. The discussion halts when the mother looks away and a vision flashes through the clinician’s mind of where she is living—in a car for now, with no access to running, much less warm, water. She had begun to tell the mother that she must wash her hands every time after she changes her child’s diaper, but instead she trails off and changes the subject.

One major goal of HepTalk, the new research collaboration between MCN and Community Health Education Concepts (CHEC), is to pinpoint that exact moment in conversations about hepatitis risk and prevention when communication breaks down. It aims to help clinicians negotiate the silence so that dialogue about hepatitis risk and prevention occurs. If the discussion occurs and if clinician and patient can engage with one another on these sensitive issues, the discussion and of itself will have a productive effect on the patient’s behavior. Paulo Freire’s “dialogicty,” the dialogue itself, is the outcome (Freire, 1970). The prevention plan that is “co-authored” by the patient will be most likely to be adopted and risks will be addressed and minimized.

HepTalk will use Standardized Patient Training to help clinicians understand the barriers to conversation (such as the clinician’s feeling of helpfulness, and the client’s feeling that she will be stigmatized if she reveals too much about her situation), and to reinforce skills that repair conversational breakdowns. A standardized patient (SP) is an actor trained to play the part of a patient and to give feedback to the clinician following the clinical encounter. At least 94 medical schools in the U.S. and Canada currently employ SPs in their teaching programs, and 26 U.S. medical schools cooperate in resource-sharing, standard-setting, and other issues relevant to implementing effective SP programs.\(^1\)

A recent study at the University of Rochester’s Family Medicine Department showed that standardized patient training is also effective in helping practicing clinicians assess their interviewing skills, especially regarding emotionally charged topics surrounding HIV such as iv drug use and sexual practices.\(^2\) The study determined that physicians can recognize problematic conversations when they are present in videotapes or standardized patient encounters, and can learn skills to address these “awkward moments” such as returning after digressions, rephrasing and clarifying and refocusing on the patient. The HepTalk team will develop standardized patient training for primary care clinicians working with the mobile poor. The training will be based on the Robert Wood Johnson-supported research in Rochester. In the HepTalk model, actors would exhibit sensitivity around issues relevant to migrant workers, as in the example above, such as lack of sanitation, poverty, shame, foreignness, and prejudice, in addition to emotionally charged topics which are manifest in the general population. These include discussions of sexual practices and iv drug use, both potential risk factors for hepatitis and barriers to successful conversations. Following the standardized patient encounter, the standardized patient and the clinician would address those skills necessary for negotiating awkward moments.

The first step in developing this model will be two workshop sessions at the 2004 National Farmworker Health Conference in Key Biscayne, FL April 29-May 1. The first conference session will deliver concrete medical details on testing and treating hepatitis in mobile populations. In the second session clinicians will access their own experiences dealing with emotionally charged issues, and they will receive training in how to address those issues.

Finding and keeping good clinicians rate high on the priority lists of most Migrant and Community Health Centers. Where the “business” of an organization is providing excellent patient care, quality clinicians are obviously crucial to the success of the health center. Many administrators know the aggravation of coping with the unexpected departure of a clinician. Clinical staff vacancies can not only affect health center earnings, but other providers are stressed by an increased patient load, continuity of care is interrupted, and organizational morale drops.

Human Resources departments are not the only ones who are seeking help with these issues. Clinicians who are motivated to work with the underserved also regularly express their frustrations regarding finding work that meets their needs professionally and personally.

Health centers serving large numbers of migrant patients face some unique challenges in building a clinical staff that possesses the specialized skills needed to work with a mobile multicultural population. Clinicians in these settings also face unusual demands, such as professional isolation, the complexity of services needed to provide basic health care, and drastic seasonal changes in work load. New providers often find that their training programs did not adequately prepare them for what can seem like overwhelming needs. More seasoned clinicians, on the other hand, are vulnerable to burnout as their idealism fades.

Migrant Clinicians Network has long recognized the importance of clinician recruitment and retention issues and has attempted to assist both health centers and clinicians in their efforts to develop stable, quality programs. Many of our programs have been geared toward helping to augment the skills of clinicians through continuing education sessions, Spanish language training, and development of practice tools and models for working with farmworkers. We have also provided opportunities for clinicians to become involved in research, to improve their access to clinical information, to network with each other and to become effective advocates and national leaders.

The creation of the Presidential Initiative to double the number of access points within the Migrant and Community Health Center safety net, will require an additional 15,000 clinicians. This estimate does not take into account the current 20 to 30 percent annual turn over within the system.

In response to the critical need to both find and hire new providers and retain those that are currently in practice, MCN has moved more aggressively into the arena. We have initiated and refined a number of our efforts, which are designed to directly impact on the problems we hear from those in the field.

We have surveyed clinicians through our membership, at workshops and at site visits, a process that has resulted in some consistent findings and recommendations. Our next step has been to take this information directly to the health centers, in the form of tools and expertise that can help them to plan and prepare for their current and future recruitment and retention needs for clinical staff.

For an in-depth evaluation and improvement approach to a health center’s recruitment and retention policy, MCN developed the Recruitment and Retention Effectiveness Review (RRER), similar in format to the familiar Primary Care Effectiveness Review (PCER). The primary purpose of the RRER is to assess health center readiness to recruit and retain high quality clinical staff and to identify areas requiring improvement. The RRER has different aspects, which can be selected depending on need.

A 15-item Health Center Self-Assessment was developed, to be used by health center leaders in order to arrive at a score reflecting their level of preparation for responding to clinical recruitment and retention needs in their setting. Results of this brief survey can indicate whether the health center may need technical assistance in this area.

The following are MCN resources that foster the recruitment and retention of clinicians in migrant health.

**New Provider Practicum in Migrant Health**

The New Provider Practicum in Migrant Health is a program that provides for a four-month working and learning experience in a migrant health center for new health care professionals. The purpose of the program is to increase the sensitivity and understanding of migrant health care issues for the New Providers as they consider careers working with underserved populations.

**Job Bank**

The Migrant Health Job Bank is an excellent place to list job vacancies or post resumes. The Job Bank lists migrant health employment opportunities, including outreach/health educators, physicians, nurses, advanced practice nurses, dentists, physician assistants, and others. Go to the job bank on MCN’s website www.migrantclinician.org for exciting career opportunities.

**Orientation Materials**

MCN has both the materials and the expertise to provide an in-depth orientation to migrant health.

**R&R Instruments and On-site TA**

The Health Center Recruitment and Retention Effectiveness Review (RRER) instrument is designed to support on-going recruitment and retention of qualified clinical staff at health centers. See inside for more details about this important tool.

**Continuing Education**

MCN is committed to providing high quality continuing education to health care providers serving migrants. MCN’s comprehensive clinical education program helps to develop excellence in practice, clinical leadership, and the dissemination of best models and practices.

**Peer Networking**

MCN serves as a source of peer networking and support. Peer networking provides not only psychological and professional support, but also allows for an exchange of information on best practices, unique solutions to problems, and sources for other resources.

**Professional Development**

MCN’s menu of services is designed to support and promote excellence in practice among clinicians who serve mobile underserved populations. We offer a range of opportunities to accommodate a diversity of needs. MCN services provide support to clinicians from recruitment through all stages of their career.
The larger RRER tool contains guidelines for health centers in the development, improvement or modification of a recruitment and retention plan. It is designed to be used in the context of a technical assistance site visit. MCN clinical staff piloted this process with two migrant health centers in 2003. Prior to the on site visit, a preliminary telephone meeting with the CEO provided background information about the health center’s staffing and perceived needs. During the one-day visit, the two reviewers met with key leaders, including CEO, Medical Director, and HR Director, and conducted one-on-one interviews with as many clinicians as were available. A written report was provided after the visit, which included a summary of the center’s current status, strengths, and recommended actions for improvement of their recruitment and retention efforts. Both were provided with resource materials as needed, such as an orientation checklist, clinician effectiveness review form, staff satisfaction survey, and sample credentialing and privileging policy.

Following the pilot of this review process, the tools have been revised and are ready for distribution. Health centers are encouraged to do the brief self-assessment and to contact MCN for technical assistance if needed. Clinical and education staff is available to provide various levels of technical assistance for recruitment and retention initiatives, as well as clinician orientation and development.

For more information call 512-327-2017 or e-mail kugelzur@migrantclinician.org

**INTERNET-BASED RECRUITMENT RESOURCES**

Rural Recruitment & Retention at [www.3net.org](http://www.3net.org) is a national job bank for rural health care providers. It is free to list an opening.

The Migrant Clinicians Network operates a job bank at [www.migrantclinician.org](http://www.migrantclinician.org). It is free to list openings and users can access individual clinicians who have listed their availability.

The American College of Nurse-Midwives (ACNM) sponsors an internet-based job bank at [www.midwifejobs.com](http://www.midwifejobs.com), for which they charge $250 for a 4-week listing.

The National Rural Health Association (NRHA) operates an online job bank for **administrative positions only** at [www.nrhrural.org](http://www.nrhrural.org).

Online services aimed at recruiting doctors and nurses to rural locations are located at [www.smalltownmdjobs.com](http://www.smalltownmdjobs.com) and [www.smalltownnjobs.com](http://www.smalltownnjobs.com). They charge $100 for a 60-day listing.

The American Academy of Nurse Practitioners operates an internet-based job bank at [www.aanpcareerlink.com](http://www.aanpcareerlink.com). The American Academy of Physician Assistants uses the same database, as do other professional organizations, which can be found at [www.healthcareers.com](http://www.healthcareers.com). Fees apply for employers posting listings.

**Health Center Self-Assessment**

Directions: The following brief questionnaire serves as a quick self-assessment for health center leadership to determine readiness for effective recruitment and retention of clinical staff. Answer the questions and score each response according to the number of points in parentheses.

1. Is recruitment and retention of high quality clinical staff a health center priority? □ Yes (10) □ No (0)
2. Is regular attention given to retention and recruitment of all key positions in the health center? □ Yes (10) □ No (0)
3. Does the center have a written recruitment and retention plan? □ Yes (10) □ No (0)
4. Is the plan reviewed annually by the board of directors? □ Yes (10) □ No (0)
5. Does your center track the turnover rate of clinical staff? □ Yes (10) □ No (0)
6. Are compensation comparability surveys conducted periodically to determine the going rates for comparable positions nationally and in the local area? □ Yes (10) □ No (0)
7. Does your health center’s compensation schedule enable it to retain qualified clinical staff? □ Yes (10) □ No (0)
8. Does the center address issues of succession of top clinical/management staff? □ Yes (10) □ No (0)
9. Does the health centers’ business plan address the cost of retention and recruitment of clinical staff? □ Yes (10) □ No (0)
10. Does the organization perform clinician satisfaction surveys? □ Yes (10) □ No (0)
11. Does the center follow a formal orientation schedule for new providers? □ Yes (10) □ No (0)
12. Is there clinical staff representation at the senior management and board levels? □ Yes (10) □ No (0)
13. Is there clinical staff representation at the Board of Directors meetings? □ Yes (10) □ No (0)
14. Is there clinical staff representation on the quality management committee? □ Yes (10) □ No (0)
15. Are there regular (at least monthly) meetings of your clinical staff? □ Yes (10) □ No (0)

**TOTAL SCORE:**

If you scored 90-110: Congratulations—your health center is a model!

If you scored 60-85: The RRER Health Center Evaluation tool will provide you with guidance for refining your recruitment and retention plans.

If you scored less than 60: Call for technical assistance!

Practitioner operates an internet-based job bank at [www.aafp.org/careers](http://www.aafp.org/careers) for a similar database for family physicians.

Don’t forget the National Health Service Corps. If you are eligible for placement of their loan repayment or scholarship candidates, you will be listed on their website at [www.nhsc.bhpr.hrsa.gov](http://www.nhsc.bhpr.hrsa.gov).
MCN Seeks 2003 Unsung Hero Nominations
In 1990, the Migrant Clinicians Network established its Annual Unsung Hero Award as a way to honor one of the unrecognized clinicians in the field of migrant health. The Award winner will receive an expense paid trip to the 2004 Annual Migrant Health Conference in Key Biscayne, FL, where he or she will honored.

Nominees for the Unsung Hero Award are distinguished by their demonstrated dedication to migrant health, participation in a variety of areas in migrant health care delivery, innovation in service delivery and prevention strategies, clinical leadership, and lack of previous recognition for their contributions to migrant health.

To nominate your Hero, please submit the clinician's name, address, telephone number, and a short paragraph describing why you believe the nominee is a Hero to: jhopewell@migrantclinician.org or mail it to Jillian Hopewell, Migrant Clinicians Network, 1309 Orchard Way, Chico, CA 95928, (530) 345-4806 voice and fax. Nominations should be received by MCN no later than March 21st, 2004.

NEWS BRIEFS

New Web Resource for TB and HIV
The CDC has developed a new website "updated guidelines for the use of rifamycins for the treatment of tuberculosis among HIV-infected patients taking protease inhibitors or nonnucleoside reverse transcriptase inhibitors. The link is http://www/cdc.gov/nchstp/tb/TB_HIV_Drugs/TOC.htm.

La Voz del Campesino:
Radio KDNA Northwest Communities Education Center
The recent 2004 Western Stream Forum featured the work of Radio KDNA, a minority public radio station in rural Washington state developed in response to the cultural and informational isolation of Hispanic/Latino and other disadvantaged communities. Radio KDNA produces quality radio programming to help such communities overcome barriers of literacy, language, discrimination, poverty, and illness. KDNA aims to empower these communities to more fully participate in our multiethnic society. For more information about this resource go to their website at http://www.kdna.org.

CALENDAR

2004 National Farmworker Health Conference
April 29-May 1, 2004
Miami, FL
National Association of Community Health Centers
301-347-0400
www.nachc.com

27th Annual Rural Health Conference
May 26-29, 2004
Sheraton Harbour Island Hotel
San Diego, CA
National Rural Health Association
(816) 756-3140
http://www.nrharural.org

Fourth National Conference on Quality Health Care for Culturally Diverse Populations
September 28-October 1, 2004
Washington, DC
718-270-7727
www.DiversityRx.ccconf