Home-Based Therapies for the Common Cold Among European American and Ethnic Minority Families

The Interface Between Alternative/Complementary and Folk Medicine

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**Background:** Most studies of alternative/complementary medicine use in children have focused on children with chronic illness and have not addressed the more common form of complementary medicine: popular home-based interventions and therapies for common low-morbidity sickness episodes. Also, there has often been a distinction between alternative/complementary medical practices used by the general population and those used by members of ethnic minority groups and commonly referred to as folk medicine or ethnomedicine.

**Objective:** To describe the home-based therapies and practices that parents from diverse ethnocultural backgrounds use to treat the common cold in their children.

**Method:** Interviews with mothers of children coming for care at a number of clinics and physicians' offices. Included were mothers from European American, African American, Puerto Rican, and West Indian-Caribbean heritages.

**Results:** Mean number of home-based remedies for the common cold did not differ among ethnic groups (controlling for maternal age, maternal education, number of children, and health insurance status). There were differences among groups regarding the frequency of use of specific remedies.

**Conclusions:** Home-based remedies for colds in childhood are commonly used. Many of the treatments are complementary to biomedical treatment (ie, antipyretics, over-the-counter cold remedies, fluids). Very few are potentially hazardous if taken in moderation. Mothers from ethnic minorities use similar amounts of home-based interventions when compared with mothers from the majority culture.

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**Editor's Note:** Whatever else can be learned from this study, it's clear that chicken soup can no longer be claimed to be only “bub-bamycin.”

**Catherine D. DeAngelis, MD**

An early study of health care practices showed that 70% to 90% of self-recognized sickness episodes are managed outside of the formal health care system. The increasing popularity of alternative/complementary medicine in recent years has further increased the options that patients and families have regarding health care interventions. Health care has been described by Kleinman as a local system composed of 3 overlapping parts or sectors: (1) the professional sector, (2) the popular sector, and (3) the folk sector (Figure). The professional sector encompasses organized healing traditions, which by nature of their history and present usage are considered the dominant local healing paradigm. Western biomedicine is one such professional sector tradition, although others such as Ayurvedic and Traditional Chinese Medicine exist. The popular sector includes self-treatment, family care, and systems of community and socially based networks of care. Overall, most health care activities occur in this sector. The folk sector includes nonprofessional healers and practitioners who use alternative therapies based on paradigms external to the dominant professional (eg, biomedical) model.

It is important to appreciate the interactive and overlapping nature of these sectors. They are not exclusive options that are singularly used during a sickness episode or during health maintenance. Patients move among the 3 sectors of the health care system in both sequential and simultaneous manners. Because of this, it becomes important for biomedical
clinchiens to have a sense of what therapies their patients may be using in addition to the prescribed and recommended biomedical therapies and management plans. In an often-quoted study, it was shown that 1 of 3 adults interviewed by telephone reported having used at least 1 “unconventional” therapy in the past year, and 72% of those respondents did not inform their physicians about their use of alternative/complementary therapies.3

Alternative therapies, alternative/complementary medicine, and holistic medicine are terms connoting the vast array of therapies and techniques outside of the traditional biomedical approach that are currently very popular. They include lifestyle and mind-body techniques (eg, nutrition, exercise, environmental, meditation), biomechanical therapies (eg, massage, spinal manipulation), biochemical therapies (eg, herbs and nutritional supplements), and bioenergetic therapies (eg, therapeutic touch, acupuncture, chi gong, prayer, and homeopathy).4 Although not exclusive to any one ethnic or socioeconomic group, the vast majority of users of alternative/complementary medicine come from the majority cultural group, including the educated middle and upper socioeconomic classes.

Although not usually defined as alternative/complementary medicine, folk medicine or ethnomedicine describes various alternative practices and therapies that are used by members of a cultural minority group. Ethnic remedies and practices are common and, like alternative/complementary therapies, are often used in combination with the professional biomedical health care system. In fact, ethnomedicine can be thought of as a subset of alternative/complementary medicine.
Studies of ethnomedicine usually have been conducted in particular ethnic minority populations, for example, the study of folk remedies for asthma in a Puerto Rican community or the study of coining in Southeast Asian immigrants. Although these types of study provide important information about the beliefs and practices of patients in diverse communities, readers often get the incorrect implication that folk medicine, by nature, is only practiced in ethnic minority communities. Because of the lack of cross-cultural and cross-socioeconomic studies, it is difficult to place these beliefs and practices into a broader perspective, ie, that of alternative/complementary therapies (which usually are conducted on samples from the majority cultural groups). Indeed, many ethnic therapies become “alternative” or “holistic” therapies, but only after they have been embraced by the general population (an example being acupuncture).

A goal of culturally sensitive health care is to place cultural beliefs and practices in perspective. Different cultural groups have different ways of conceptualizing illness, but individuals from all cultural groups use the 3 sectors of the health care system, including the personal and folk sectors. It is the goal of the present study to identify home-based alternative and ethnic practices and approaches to a common childhood illness (the common cold) from a cross-cultural perspective. Our hypothesis is that personal, home-based practices for a common childhood illness occur with similar frequency among families of diverse cultural groups, and that these practices are truly “complementary” to the professional biomedical system, and not an exclusive “alternative” to that system.

**RESULTS**

During the study period, no mother refused to participate in this short interview while waiting to be seen by the clinician. We interviewed a total of 292 parents. Seven mothers’ responses were excluded from the analysis because of missing data and 4 mothers had no previous experience in treating a child with a cold; therefore, our sample size is 281. The ethnocultural breakdown was as follows: European American, 85; African American, 68; Puerto Rican, 108; and West Indian–Caribbean, 20. All European American parents were either third-generation American (ie, respondent and both of her parents were born in the United States) or mixed second-generation American (ie, respondent and at least 1 of her parents were born in the United States).

Table 1 shows a summary of the sociodemographic characteristics of the sample. Significant differences among ethnocultural groups were seen regarding maternal age, maternal education, and percentage having private health insurance.

The mean number of home therapies for colds used per ethnocultural group (controlling for maternal age, education, insurance status, and number of children) is presented in Table 2. Since many mothers’ responses to the question included biomedical home therapies, such as antipyretics and over-the-counter cold medications, we determined the mean number of responses including and excluding such therapies. There were no differences among ethnocultural group in either analysis.

The most common home therapies used per ethnocultural group are presented in Table 3. Biomedical over-the-counter therapies are listed first, followed by other home therapies and remedies. Antipyretics and miscellaneous over-the-counter medications were commonly used by all mothers. Other home therapies were used in varying degrees in different ethnocultural groups. In general, European American mothers used fluids, moisture, and heat; African American mothers, chicken soup, camphor rubs, and teas; Puerto Rican mothers, cam-
The literature regarding alternative/complementary medical practices used for childhood health and illness is scant. Much of this literature concerns alternative practices for chronic illness, such as asthma, cystic fibrosis, arthritis, and cancer. Little is known about alternative/complementary or non–physician-directed therapies for “low morbidity–high frequency” sickness episodes, or for health maintenance. One study from a pediatric outpatient department in Canada reported that 11% of families questioned had used complementary medicine, including chiropractic, homeopathy, naturopathy, and acupuncture. The definition of complementary medicine in that study appeared to include only interventions that would fit into the professional or folk sectors of Kleinman’s healthcare system model, and did not include home-based practices from the popular sector. Therefore, that study reports only the “tip of the iceberg” with regard to unconventional and alternative/complementary therapies in children. The present study specifically addressed home-based practices, which we feel constitute the majority of parent-initiated interventions.

One of our goals was to address the issues of alternative/complementary therapies in a cross-cultural perspective. It was our impression that both the medical literature and the popular press often conceptualize unconventional therapies practiced by the majority culture and ethnic minorities differently. Our goal was to determine both the difference and similarities in home health care interventions among mothers from diverse ethnic backgrounds. Our results show that the amount of home-based alternative/complementary therapies is similar among mothers from both the majority and minority cultural groups, even after controlling for economic and demographic differences. There was variability among cultural groups, however, in the relative frequency of specific remedies and therapies, as well as in categories of alternative/complementary therapies. Some of these differences support past literature and conventional wisdom regarding common culture-specific therapies; others do not. For example, the use of camphor rubs (such as Vicks Vaporub) has often been cited as a common therapy in the Puerto Rican community. Our study supports this and shows that usage of these common remedies continues to exist over time and through generations. The use of camphor rubs is not exclusive to Puerto Ricans, though, as can be documented in the literature, as well as in the present study. Seven per-

<table>
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<th>Table 3. Home Remedies and Therapies for Colds</th>
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<tr>
<td><strong>European Americans (n = 85)</strong></td>
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<tr>
<td>Remedy</td>
</tr>
<tr>
<td>Acetaminophen</td>
</tr>
<tr>
<td>Ibuprofen</td>
</tr>
<tr>
<td>Miscellaneous OTC*</td>
</tr>
<tr>
<td>Fluids or liquids</td>
</tr>
<tr>
<td>Chicken soup</td>
</tr>
<tr>
<td>Steam or heat</td>
</tr>
<tr>
<td>Orange juice</td>
</tr>
<tr>
<td>Vitamins</td>
</tr>
<tr>
<td>Elevate head</td>
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<tr>
<td>Juice, nonspecified</td>
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*OTC indicates over-the-counter remedies.
†Connotes commercially prepared soup in canned or dry form; no flavor specified.

phor rubs, chicken soup, and other fluids; and West Indian–Caribbean mothers, herbal and mint teas, camphor rubs, and chicken soup.

The listed home therapies and remedies can be grouped into the following alternative/complementary medicine categories. Herbs and nutritional supplements include herbal teas, mixtures, and vitamins; physical therapies include massage, rubs, and exercises; prayer and spiritual include various forms of prayer and spiritualist healing; and humoral and hot-cold refers to the traditional theory of balance and homeostasis as it relates to illness categorization and treatment. When responses were placed into these groupings, the following differences were noted (Table 4). European American mothers’ responses commonly included interventions that fit within the hot-cold theory of illness. Examples of these include warm baths, keeping warm or dressing warmly, warm compresses, and use of steam. The most common response categories for African American mothers were herbs and nutritional supplements (vitamins and herbal teas) and physical modalities (rubs and salves). The Puerto Rican mothers’ responses fit mostly into the physical treatment category (including the common use of camphor rubs), whereas 15 of the 20 West Indian–Caribbean mothers mentioned herbal teas (including senna, rosemary, milo, garlic, and bush tea, as well as unspecified herbal teas).

A small proportion of mothers (3.5% of total sample) mentioned alcohol rubs as a treatment (2 African Americans, 7 Puerto Ricans, and 1 West Indian–Caribbean). No other remedies were identified as having significant potential for serious adverse effects if taken in moderation.
cent of the European American mothers, 13% of African American mothers, and 20% of West Indian–Caribbean mothers mentioned its use. Although camphor rubs may be considered an over-the-counter remedy in the majority European American culture, their common use in some ethnic groups assigns them the designation of folk remedy.

Our finding that humoral or hot-cold beliefs were more common in the European American group than the Puerto Rican group merits discussion. Much has been written about the hot-cold theory of disease in Hispanic-Puerto Rican group merits discussion. Much has been written about the hot-cold theory of disease in Hispanic-Latino or Puerto Rican folk medicine. Results from this study suggest that the prevalence of humoral practices is low in this group of Puerto Rican mothers and is in fact relatively high for the group of European American respondents. Cross-cultural studies such as this place these practices in perspective and help guard against incorrect assumptions based on noncomparative data.

The observation that the most common home-based therapies included over-the-counter medications such as antipyretics and cold remedies lends further support to the belief that, in most cases, home therapies are truly complementary and not used in isolation from biomedical care. In fact, many of the home-based remedies could be recommended by physicians. If one ranks these home-based therapies on relative suitability within the biomedical model, most could fit within a broad definition of biomedical care (eg, fluids, juices, humidification). The least biomedical of the remedies would be herbal teas and camphor rubs, which were used with greater frequency in the ethnic minority groups.

The definition of what is considered an alternative vs nonalternative, home-based therapy is complex. It is important to note that biomedicine and alternative/complementary medicine are not static categories. Substantial shift, overlap, and redefinition continue to occur. Many over-the-counter remedies and environmental therapies (such as humidifiers) may have some benefit from the biomedical perspective, and some practitioners advise parents to use them under specific conditions. In these cases, they may be considered home-based but not alternative, since they were recommended by the health care practitioner. If these therapies are used without the recommendation of the health care practitioner, one might consider them alternative. Likewise, if a biomedical health care practitioner recommends a herbal tea, acupuncture, or a homeopathic remedy, are these therapies truly alternative? One can argue that in this situation they are not, whereas in other circumstances they would definitely be considered alternative. We did not specifically ask whether the remedies used were recommended by the health care practitioner. Future studies on home remedies may benefit from including questions such as, “Where did you learn about this remedy?” or “Who advised you to use this remedy?” to determine whether the therapy was truly alternative or recommended by a physician.

These data support the concept of medical pluralism: the theory that individuals draw on multiple modalities and healing traditions in their health care practices. Since patients do not often provide physicians and nurses with information about home-based or alternative/complementary therapies, it becomes crucial for providers to initiate discussion on this topic in a nonjudgmental manner.

Before this study, we assumed that parents might frequently use alternative/complementary therapies for common childhood illnesses such as colds. Our data suggest that, while parents often use home-based therapies, the use of therapies that are truly alternative to biomedical practice is minimal.

One limitation of this study is its sampling design. A study of alternative medicine that relies on a clinic-based sample may underreport the use of alternative/complementary and unconventional medicine. Respondents may feel uncomfortable discussing nonbiomedical practices in a physician’s office. We attempted to limit this by employing individuals not associated with the health care staff as interviewers and by explaining the reasons for the study. We do appreciate, though, that the clinical environment where the interview took place may have made candid discussion difficult. Also, by using a clinical sample, we may have missed those families who underutilize biomedical care. These families may also be high users of alternative/complementary therapies. A population-based sample would have been more optimal in this regard.

We also had a relatively small sample of West Indian–Caribbean parents, so the results from this group should be interpreted with caution. Sparse information is available in the clinical literature about this cultural group. Although they share with African Americans the stigma of minority status and the resultant discrimination, the cultures of the West Indian islands are, in many ways, distinct from traditional African American culture. We strongly recommend that researchers who work in ethnically diverse settings consider members of West Indian–Caribbean communities separate from African Americans. Further studies within this growing community are needed to gain a better understanding of this underrepresented group.

Despite these limitations, our study suggests that parents use various home remedies during common childhood illness episodes such as colds, and that these home interventions are generally benign and truly do complement biomedical care. Furthermore, parents from different ethnocultural groups, including the majority European Americans, list similar numbers of home remedies.

### Table 4. Frequency of Categories of Alternative Remedies

<table>
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<tr>
<th>No. (%)</th>
<th>European Americans (n = 85)</th>
<th>African Americans (n = 68)</th>
<th>Puerto Ricans (n = 108)</th>
<th>West Indian–Caribbean (n = 20)</th>
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<tr>
<td>Herbs or nutritional supplements</td>
<td>8 (9)</td>
<td>13 (19)</td>
<td>15 (14)</td>
<td>14 (70)</td>
</tr>
<tr>
<td>Physical (including rubs and camphor)</td>
<td>7 (8)</td>
<td>13 (19)</td>
<td>25 (23)</td>
<td>4 (20)</td>
</tr>
<tr>
<td>Prayer or spiritual</td>
<td>1 (1)</td>
<td>3 (4)</td>
<td>9 (8)</td>
<td>1 (5)</td>
</tr>
<tr>
<td>Humoral, hot-cold</td>
<td>20 (24)</td>
<td>6 (9)</td>
<td>8 (7)</td>
<td>1 (5)</td>
</tr>
</tbody>
</table>
The use of specific remedies and categories of remedies do vary by ethnocultural affiliation, though. Health care practitioners need to be aware of the common use of home-based therapies. They should feel confident that these remedies are mostly benign and complementary to our biomedical care. Clinicians are encouraged to inquire about their use with patients and families. The importance of open communication regarding the overall treatment of sickness cannot be overstated. When physician and patient talk openly about these issues, the therapeutic environment improves, opportunities for health education increase, and the patient gains confidence in the physician as a therapeutic ally. In addition, the chance that the patient will suffer adverse effects of harmful therapies decreases, and the physician can gain important information that will help place the biomedical therapeutic plan within the patient’s lifestyle and world view, thus increasing the likelihood of adherence to the clinician’s therapeutic plan.

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REFERENCES


Announcement

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