Homeopathy and Naturopathy

Practice Characteristics and Pediatric Care

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Objective: To describe the practice characteristics and pediatric care of homeopathic practitioners (HPs) and naturopathic doctors (NDs).

Design: Cross-sectional, descriptive survey.

Setting: Homeopathic and naturopathic practices in Massachusetts.

Participants: Homeopathic practitioners (N = 42) and NDs (N = 23) identified from the yellow pages, regional and national society membership lists, schools, magazine advertisements, and by word-of-mouth. The response rate was 55% (23/42) for HPs and 65% (15/23) for NDs.

Main Outcome Measures: Demographics, practice characteristics, fee structure, and amount of pediatric care. Practitioners were asked for their approach to childhood immunizations and to treating a febrile neonate. Data were analyzed using simple descriptive statistics.

Results: Almost all respondents were white. Among the HPs, 13 (57%) were licensed medical doctors. Naturopathic doctors and HPs reported having an average of only 25 to 40 patient visits per week, but children and adolescents accounted for up to one third of these visits. Nearly all reported treating children, but fewer than half of the practitioners reported any formal pediatric training. Initial patient visits typically lasted more than 1 hour and cost $140 to $150. Follow-up visits were scheduled every 4 to 6 weeks and lasted more than 30 minutes on average. Insurance covered less than one third of the patient visits, and sliding scale payments were offered by less than half of the respondents. Most practitioners reported that they did not actively recommend immunizations and fewer than half of the nonphysician practitioners reported that they would refer a 2-week-old neonate with a fever to a medical doctor or emergency medical facility.

Conclusions: Many patients using homeopathy and naturopathy are children. Visits to these providers are frequent and fees are primarily paid out-of-pocket. Failure on the part of these providers to recommend immunizations or recognize potentially serious illnesses is cause for concern.


Editor’s Note: All of us, even the nay-sayers to complementary medicine, should be aware of the information contained in this study. Ignoring it won’t make it go away; we need to understand and use or correct the complementary methods.

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Homeopathy, founded by 19th-century German physician Samuel Hahnemann, is based on 2 major principles: (1) similia similibus carentur—“like is cured by like” (ie, an illness, such as dermatitis, can be treated by a substance, such as poison ivy extract, which produces similar symptoms in a healthy person) and (2) doses minimae—“potentiation through dilution” (ie, more dilute concoctions are more powerful and therapeutic).1,2 Homeopathic remedies are prepared by serial dilutions and vigorous shaking (succussion) and contain little or no measurable active ingredients. However, homeopaths believe the preparation of the solution imparts an energetic imprint, enabling the patient’s own body and vital energy to fight the original cause of disease.2,3 Two recent meta-analyses of controlled trials of homeopathy demonstrated positive trends for homeopathy compared with placebo treatment.5,6 Randomized controlled trials have shown that homeopathic medicine is effective for treating influenza and acute childhood diarrhea.5,7

The term naturopathy describes a wide range of therapies that are considered “natural medicines.” Naturopathic doctors (NDs) believe that (1) the body
PARTICIPANTS AND METHODS

We performed a cross-sectional survey of HPs and NDs in Massachusetts from July to November 1998. Both HPs and NDs were identified through the yellow pages, regional and national society membership, local training schools, advertisements in holistic health magazines, and by word-of-mouth. From these sources, 42 HPs and 23 NDs were identified in Massachusetts.

The survey instrument was based on the National Hospital Ambulatory Medical Care Survey from the National Center for Health Statistics at the Centers for Disease Control and Prevention, Atlanta, Ga. It was pilot tested in a telephone survey of a subset of 5 practitioners listed in the yellow pages while we awaited printed lists from the other sources named earlier. Questions were further refined and the remaining providers were mailed written surveys in August 1998.

One month after the initial mailing, nonrespondents received second surveys and 3 months later were called for follow-up. One HP and 3 ND addresses were nondeliverable. The response rate was 55% (23/42) for HPs and 65% (15/23) for NDs. We attempted to reach all nonrespondents to determine their reasons for nonresponse. Reasons given were that practitioners were too busy to complete the survey, they treated only animals (2 veterinary homeopaths), or they did not see children in their practice.

SURVEY CONTENT

The survey contained 4 pages of questions and required approximately 15 minutes to complete. Demographic items included age, race, and sex. Five questions addressing professional status were included to determine educational degrees, attendance at a homeopathic or naturopathic school, length of training, certifications in homeopathy or naturopathy, and membership in professional societies. Several questions addressed therapeutic specialization (nutrition, herbal medicine, midwifery, hydrotherapy, massage, acupuncture, exercise, and relaxation techniques). Nine questions addressed professional practice characteristics: solo vs group practice, number of patients seen per week, length of initial and follow-up visits, frequency of visits, and the source of patients (advertisements or referrals from other health professionals). Fee and insurance issues were addressed in 3 questions that inquired about initial and follow-up visit fees, the proportion of patient fees covered by fee-for-service insurance, the use of a sliding scale, and acceptance of patients receiving Medicaid.

Pediatric care was investigated in several questions about specific training in pediatrics, length of pediatric training, and pediatric patient load. Three subjective questions were included to assess practitioners' personal beliefs and clinical judgment about pediatric care. Practitioners were asked (1) whether they recommend childhood immunizations; (2) how many times they would see a patient before determining that a condition was not responding to homeopathy or naturopathy; and (3) what immediate action they would take if presented with a 2-week-old neonate with a temperature of 38.6°C. For the third question, respondents were given the choices of either (1) referring the patient to a physician, (2) taking more history, (3) treating the patient, or (4) a blank option to write in their own response. Finally, practitioners were asked about the health care professionals (doctor of medicine or doctor of osteopathy, ND, chiropractor, and others) to whom they commonly refer patients.

ANALYSIS

All data were entered into a database (Microsoft Access; Microsoft Corporation, Redmond, Wash), exported to a spreadsheet program (Microsoft Excel; Microsoft Corporation), and analyzed using simple descriptive statistics. Normally distributed data are reported as averages; nonnormally distributed data are reported as medians, modes, and ranges. Because no a priori hypotheses were made and because of the small sample size, no post hoc statistical analysis was performed.

has a strong, vital, and innate power to heal itself; (2) symptoms of disease reveal the body’s attempt to reach a natural balance, and (3) practitioners must consider the entire person (including mental, emotional, and social health) in treatment.8 Curing disease requires natural methods to restore the proper balance and health to the body. Naturopathic therapies focus on eliminating bad habits and on detoxification (eliminating or reducing the use of tobacco, alcohol, and coffee and detoxification of the liver and bowel); eating clean, organic food (a pesticide-free, high-fiber, low-protein diet and taking nutritional and herbal supplements); corrective habits and lifestyle modification (exercise, meditation, imagery, counseling, biofeedback, and breathing techniques); and hydrotherapy (steam, sitz, and Turkish baths; hot tub use, colonic irrigation, and poultices).9 Acupuncture, chiropractic medicine, and particularly homeopathy are therapies that rely on vitalistic energy and are often used by naturopaths to stimulate the body’s natural healing processes. While the efficacy of certain naturopathic therapies, such as a balanced diet and regular exercise, are common medical knowledge, many others, such as hydrotherapy, colonic irrigation, fasting, physical medicines (therapeutic use of touch, heat, cold, electricity, and sound), and herbal and nutritional supplements have not been adequately tested in controlled clinical trials.

Homeopathy and naturopathy are experiencing a renaissance in the United States. Almost 2 million visits to homeopathic practitioners (HPs) were estimated in 1997.10 Retail sales of homeopathic remedies were estimated at $100 million in 1988, $165 million in 1994, and $250 million in 1996.1112 Worldwide sales were estimated at $1.15 billion in 1997. Naturopathic therapies, which include vitamins, dietary supplements, and herbal remedies, have enjoyed even greater popularity. In 1990, dietary supplements and megavitamin sales were projected at $2 billion dollars. In 1997, this number increased to $10.1 billion.10,12

Homeopathy and naturopathy are common practices in the pediatric population. According to a survey by Spigelblatt et al13 of the use of complementary and alternative medicine (CAM) in pediatrics, HPs and NDs...
were the second and third most frequently consulted CAM practitioners. Furthermore, this workforce of CAM providers is growing rapidly. In 1997, there were an estimated 1900 NDs in the United States, \(^{14}\) and that number is expected to triple in the next 15 years. An estimated 2500 to 4000 professionals practice homeopathy in the United States, a few hundred of whom are physicians. \(^{15,16}\) The National Center for Homeopathy (Alexandria, Va) grew 50% between 1991 and 1994 and reported 7000 members in 1998, with almost half of those being interested laypeople. \(^{15}\) These estimates might even underestimate the number of HPs. According to a state \(^{17}\) and a national \(^{18}\) survey of chiropractors, 10% to 37% of chiropractors practice some form of homeopathy (5200 to 18 500 chiropractors).

Given the increasing use of CAM, media publicity, and the number of providers, it is likely that primary care physicians will increasingly be asked to refer patients to CAM providers and to coordinate their services. Yet, little is known about the practice patterns, fees, and insurance reimbursement? How many have special pediatric training and regularly treat children? And finally, considering many alternative practitioners’ opposition to conventional medicine, how do HPs and NDs view childhood immunizations and approach potentially serious pediatric conditions?

### RESULTS

Forty-two HPs and 23 NDs were identified in Massachusetts. Because Massachusetts does not regulate the credentialing or licensing of HPs or NDs, no central government agency was available to provide a comprehensive list of practitioners. We identified practitioners from the following sources: the yellow pages (5 HPs and 7 NDs), the North American Society of Homeopaths (Seattle, Wash) (6 HPs), the National Center for Homeopathy (27 HPs), the Massachusetts Association of Naturopathic Physicians (Boston, Mass) (18 NDs), the American Association of Naturopathic Physicians (Seattle) (12 NDs), the Homeopathic Academy of Naturopathic Physicians (Amherst, Mass) (2 NDs), the New School of Homeopathy (15 HPs), advertisements in holistic health magazines (3 HPs), and word-of-mouth (1 ND). Some practitioners were identified in more than 1 source.

#### DEMOGRAPHICS AND TRAINING

Almost all respondents were white (97%) and male (53%). The average (SD) ages of HPs and NDs were 46 (± 4) years and 37 (± 5) years, respectively.

The HPs held the following degrees: BA or BS, 21 (91%); MD, 13 (52%); license in acupuncture, 3 (13%); DC, 2 (9%); and MN, 2 (9%). Homeopathic education varies considerably and formal training is not required for practice in Massachusetts; the median reported training in homeopathy as of August 1998 was 3 years and ongoing, ranging from 3 weeks to 20 years. Most HPs trained at several schools or with several mentors; 9 (39%) trained at the New England School of Homeopathy (Amherst, Mass); 9 (39%) at the National Center for Homeopathy; and 4 (17%) at the International Foundation for Homeopathy (Edmonds, Wash). Of those who attended a formal program, the average year of graduation was 1990. Five (22%) were certified by a board in homeopathy (American Board of Homeotherapeutics, Charlottesville, Va, or the Council for Homeopathic Certification, San Francisco, Calif).

Naturopathic doctors held the following degrees: BA or BS, 12 (80%); license in acupuncture, 2 (13%); or DC, 2 (13%). Most naturopaths attended 4-year programs, graduating on average in 1990. Eight (53%) attended Bastyr University (Kenmore, Wash) and 6 (40%) attended the National College of Naturopathic Medicine (Portland, Ore). Eleven (73%) of naturopaths were certified by a state board (such as those of Washington, Oregon, Arizona, or Connecticut) or a national certification board (Naturopathic Physicians Licensing Examinations, Phoenix, Ariz).

### PRACTICE CHARACTERISTICS

Homeopaths saw an average of 37 patients per week, while naturopaths saw 26 (Table 1). Visit frequency was typically 1 visit every 4 to 6 weeks for both groups.

### SCOPE OF PRACTICE

Aside from prescribing homeopathic remedies, 18 HPs (78%) prescribed nutritional supplements, 9 (39%) counseled on nutrition, 9 (39%) recommended herbal therapies and phytotherapies, and 7 (30%) recommended relaxation techniques. All NDs prescribed nutritional supplements, herbal therapies, and phytotherapies, and performed nutritional counseling, and 14 (60%) recom-

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Homeopathic Practitioners (n = 23)</th>
<th>Naturopathic Doctors (n = 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group practice, %</td>
<td>48</td>
<td>53</td>
</tr>
<tr>
<td>Total No. of patients seen per week</td>
<td>37 (20)</td>
<td>26 (16)</td>
</tr>
<tr>
<td>Pediatric patients seen per week</td>
<td>12 (10)</td>
<td>5 (3)</td>
</tr>
<tr>
<td>Visit length, min</td>
<td>72 (22)</td>
<td>70 (19)</td>
</tr>
<tr>
<td>Initial visit</td>
<td>33 (12)</td>
<td>36 (14)</td>
</tr>
<tr>
<td>Follow-up visit</td>
<td>157 (53)</td>
<td>139 (61)</td>
</tr>
<tr>
<td>Visit fees, $</td>
<td>66 (17)</td>
<td>72 (17)</td>
</tr>
<tr>
<td>Percentage of patients covered by insurance (median/mode)</td>
<td>32 (22/0)</td>
<td>16 (1/0)</td>
</tr>
<tr>
<td>Percentage of practitioners offering sliding scale fee</td>
<td>39</td>
<td>33</td>
</tr>
<tr>
<td>Percentage of practitioners accepting Medicaid</td>
<td>26</td>
<td>13</td>
</tr>
</tbody>
</table>

*Data are given as mean (SD) unless otherwise indicated.*
mended hydrotherapy, 5 (33%) recommended exercise, and 5 (33%) recommended relaxation techniques.

REFERRAL PATTERNS

Respondents reported that most of their patients (57% of HP patients and 72% of ND patients) were self-referred (ie, via the yellow pages, friends, and advertisements). Thirteen percent of HP patients and 9% of ND patients were referred by physicians. The remaining were referred by other healthcare professionals. Most HPs and NDs referred patients to physicians (16 and 12, respectively), massage therapists (12 and 9, respectively), psychologists (12 and 11, respectively), and acupuncturists (11 and 9, respectively).

PEDiatric CARE

Seven (30%) of HPs and 15 (33%) of NDs reported training in pediatrics. Almost all HPs (22 [96%]) and all NDs (15 [100%]) saw pediatric and adolescent patients regularly. Pediatric and adolescent patients comprised 32% of the total number of patients for HPs (12 of 37 visits per week) and 19% for NDs (5 of 26 visits per week).

CLINICAL JUDGMENT

When questioned about the number of treatments necessary to determine that homeopathy or naturopathy was not helping a patient’s condition, both groups reported an average of 3 sessions. Eight (35%) of 23 of HPs and 3 (20%) of 15 of NDs actively recommended immunizations, while 2 HPs (9%) and 1 ND (7%) openly opposed childhood immunizations. The remainder reported that they did not make any recommendations regarding immunization or omitted the question. Faced with a neo-

PHYSICIAN VS NONPHYSICIAN HOMEOPATHS

Compared with nonphysician HPs, physician HPs in our sample saw more patients weekly, with a higher proportion of pediatric patients (Table 2). Initial and follow-up visit fees were slightly higher for physician HPs. However, physician HP visits were more often covered by insurance than nonphysician HP visits. More physician HPs accepted Medicaid patients (46% vs 0%) and participated in a health maintenance organization plan (62% vs 20%). There were no other major differences in practice characteristics of physician and nonphysician HPs.

In our study of HPs and NDs, we focused on questions that pediatricians might ask about CAM practitioners in their communities. We identified practitioners in our region and characterized their practice characteristics and pediatric care.

Identifying HPs and NDs in Massachusetts was difficult given the lack of state regulations for practice or a central licensing agency. The National Center for Homeopathy and the local homeopathic school, the New School of Homeopathy, served as our primary sources for HPs. Similarly, the Massachusetts Association of Naturopathic Physicians and the American Association of Naturopathic Physicians were the primary sources for NDs. Few practitioners (<12% of HPs and <30% of NDs) were listed in the yellow pages. We identified 42 HPs and 23 NDs in Massachusetts. However, the number of people prescribing these therapies could be much higher; interested laypeople account for almost half of the members of the National Center for Homeopathy.15 Many of them provide these services as a small part of their practice and/or could be identified only by word-of-mouth referrals within communities. Currently, there is a movement within both communities to establish formal licensing and certification procedures to ensure certain qualifications and training requirements. In the United States, homeopathy is presently licensed in only 3 states to physicians and in 1 state under the supervision of a doctor of medicine or doctor of osteopathy; naturopathy is licensed in 11.

At the height of their popularity in the early 1900s, there were 12 naturopathic colleges and 20 homeopathic medical colleges in the United States.19,20 Currently, there are 4 full-time schools of naturopathy and no full-time homeopathic schools, although 20 schools offer courses and continuing education in homeopathy.21 While there is a formal university program for naturopathy, homeopathy currently lacks uniform educational and training standards. Naturopathic doctors who

Table 2. Practice Characteristics of Physician vs Nonphysician Homeopathic Practitioners*

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Physician Homeopathic Practitioners</th>
<th>Nonphysician Homeopathic Practitioners</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 13)</td>
<td>(n = 18)</td>
</tr>
<tr>
<td>Group practice, %</td>
<td>46 (n = 6)</td>
<td>50 (n = 5)</td>
</tr>
<tr>
<td>Pediatric patients treated, %</td>
<td>100 (n = 15)</td>
<td>90 (n = 9)</td>
</tr>
<tr>
<td>Total No. of patients seen per week</td>
<td>40 (23)</td>
<td>29 (6)</td>
</tr>
<tr>
<td>No. of pediatric patients seen per week</td>
<td>16 (11)</td>
<td>8 (7)</td>
</tr>
<tr>
<td>Visit length, min</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial visit</td>
<td>75 (19)</td>
<td>77 (9)</td>
</tr>
<tr>
<td>Follow-up visit</td>
<td>32 (10)</td>
<td>40 (8)</td>
</tr>
<tr>
<td>Visit fees, $</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial visit</td>
<td>165 (50)</td>
<td>144 (57)</td>
</tr>
<tr>
<td>Follow-up visit</td>
<td>69 (16)</td>
<td>60 (17)</td>
</tr>
<tr>
<td>Percentage of fees covered by insurance</td>
<td>51†</td>
<td>6‡</td>
</tr>
<tr>
<td>Percentage of practitioners offering sliding scale fee</td>
<td>31 (n = 4)</td>
<td>50 (n = 5)</td>
</tr>
<tr>
<td>Percentage of practitioners accepting Medicaid</td>
<td>46 (n = 6)</td>
<td>0 (n = 0)</td>
</tr>
</tbody>
</table>

* Data are given as mean (SD) unless otherwise indicated.
† Range, 0% to 100%; median, 50%; mode, 50%.
‡ Range, 0% to 25%; median, 0%; mode, 0%.

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responded to the survey and reported an average of 4 years of training, whereas HPs reported anywhere from 180 hours to 20 years of training. Within the homeopathic community, there is a push to form formal 4-year homeopathic medical schools to “establish consistent standards for homeopathic medical education.” However, this process will be tedious and costly, and in the meantime, how do physicians considering patient referrals determine practitioner qualifications? Several national boards certify homeopathic practitioners: the Council on Homeopathic Certification; North American Society of Homeopaths (certification test similar to the United Kingdom’s Society of Homeopaths); American Board of Homeotherapeutics, Charlottesville, Va (which offers the diploma in homeotherapeutics certification for physicians); and the Homeopathic Academy of Naturopathic Physicians (which offers the diploma of the Homeopathic Academy of Naturopathic Physicians).

**Practice Patterns** of physician HPs have been described by Jacobs et al. Our study builds on this data by including nonphysician HPs and NDs. The average ages of physician and nonphysician HPs in our study were 45 and 46 years, respectively, similar to the study by Jacobs et al. The NDs were younger, with an average age of 37 years. In our study, both HPs and NDs reported visit costs similar to those given in the study by Jacobs et al: for initial visits, $150 and $139 for HPs and NDs, respectively, compared with $137; and for follow-up visits, $60 and $72 for HPs and NDs, respectively, compared with $55. The typical cost for a pediatric office visit ranges from $90 to $110 for new patients and approximately $50 for established patients. Our respondents reported slightly longer visits than those given in the study by Jacobs et al: 72 and 70 minutes for HPs and NDs compared with 59 minutes; and 33 and 36 minutes for HPs and NDs compared with 25.4 minutes. The shorter visit length of physician HPs might reflect the greater time constraints on physicians. However, visits for homeopathy and naturopathy, even when performed by physicians, are substantially longer (33 minutes on average) than visits to conventional physicians (14 minutes). This greater contact time and the nature of the homeopathic history-taking process might contribute to patient satisfaction.

Fees for homeopathy and naturopathy are primarily paid by patients and families out-of-pocket. The median percentage of fees covered by insurance and other third parties was 22% for homeopathy and 1% for naturopathy. Visits (1 every 4-6 weeks) are more frequent than those to mainstream physicians and, coupled with low insurance reimbursement, indicate substantial expenses for these services. Only about one third of HPs and NDs offered a sliding scale for patients and few accepted Medicaid patients. An interesting finding was the difference in fee structure between the physician and nonphysician homeopaths. Although physician HPs charged slightly more ($21 and $9 more for initial and follow-up visits, respectively), many more physician HPs accepted Medicaid patients, belonged to a health maintenance organization, and had higher insurance reimbursement rates (Table 2). These data suggest that homeopathic care performed by physicians might be more affordable and increase access to low-income groups seeking CAM services.

A substantial proportion of patients of HPs and NDs are children—approximately one third in our study. The use of CAM in pediatrics is of concern for 3 major reasons: (1) the possible toxicity of therapy; (2) attitudes held by some CAM providers against immunization; and (3) the questionable ability of CAM providers to recognize potentially serious, medically treatable conditions. Homeopathic remedies are generally considered very safe, because they contain little, if any, measurable or active ingredients. Many naturopathic techniques or products are well-known constituents of general health, such as a high-fiber, low-protein diet rich in fruits and vegetables; exercise; relaxation; and avoidance of tobacco, alcohol, and caffeine. However, NDs commonly prescribe herbal remedies and dietary supplements whose contents and drug interactions in children are unknown. Pediatricians reported a case of partial thickness burns from a garlic petroleum jelly plaster, which was placed on the feet of a febrile infant under the direction of an ND. Others have reported 2 deaths thought to be related to coffee enemas, a common naturopathic treatment. Other procedures that may be dangerous for children include colonic irrigation and fasting.

The attitudes against immunization held by HPs and NDs are documented by several investigators. In surveys of homeopaths in Australia and the United Kingdom, most (83% and 70%, respectively) practitioners did not recommend immunization. In fact, a study in England found that homeopathy was the most common reason for noncompliance with immunization regimens. Similar sentiments against immunization are shared by NDs, who often view immunization programs as “unnatural, unnecessary, and elitist.” Less than one third of our respondents recommended immunization, less than 10% opposed immunization, and the remainder did not actively make recommendations. Several reasons have been postulated for these views: a general antipathy with conventional medicine, apprehension of detrimental side effects of immunization, and the opinion that their own practices provide better, natural protection that “obviates the need for vaccination.”

Physicians may also fear the consequences of delayed treatment for serious medical conditions. Of the respondents, both HPs and NDs saw patients an average of 3 times, or for 3 to 4.5 months, before determining that a condition was not responding to therapy. When presented with a patient with a fever, 60% of NDs and 50% of nonphysician HPs would not immediately refer the patient to a physician or an emergency facility. Thirty-three percent of nonphysician HPs would rather treat the child themselves with homeopathic remedies. It is worrisome that a substantial proportion of these providers of pediatric care are not equipped with the clinical skills to recognize emergent conditions for which homeopathic or naturopathy might not be effective or expedient, and that could result in detrimental outcomes.

This study has several limitations. First, it was confined to Massachusetts and needs to be replicated in vari-
ous geographic areas, particularly locations outside of New England, with a larger sample population. Selection bias also limits this study. Because the surveys required 10 to 20 minutes to complete, busier practices and those practices with less pediatric experience were less likely to respond. Other limitations included the self-reporting of data as opposed to direct observation. This general survey of practitioners also does not address patient satisfaction, efficacy, or adverse effects of homeopathic or naturopathic therapies.

In summary, a substantial number of children are treated by HPs and NDs who are not licensed in most states and may not be adequately trained in pediatric care. Visits to these alternative medicine providers are more frequent and substantially longer than visits to primary care physicians. Fees for these services are rarely covered by insurance. Of concern to pediatricians, most respondents said that they did not recommend childhood immunizations and most NDs would not immediately refer a neonate with a fever to a physician or an emergency facility. These results indicate a clear need to increase communication with the alternative medicine community and perhaps initiate education about the risks and benefits of immunization and the ability to recognize emergent medical conditions. Additional studies are needed to address the safety and effectiveness of homeopathic and naturopathic therapies for children, as well as the elements of that care that contribute most strongly to patient satisfaction.

Accepted for publication June 25, 1999.

This work was funded by Harvard Medical School, Office of Enrichment Programs, Boston, Mass; and the Children's Hospital, Boston.

We would like to thank Charles Berde, MD, and Judy Palfrey, MD, for their thoughtful comments on the manuscript; and Yuan-Chi Lin, MD, MPH, Lisa Kynvi, and the entire Pain Treatment Service at Children's Hospital for their assistance, encouragement, and support of this work.

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