Published in final edited form as:

Clin Pediatr (Phila). 2011 February ; 50(2): 153–158. doi:10.1177/0009922810384724.

Attitudes, Patterns of Recommendation, and Communication of Pediatric Providers About Complementary and Alternative Medicine in a Large Metropolitan Children's Hospital

Anjana Kundu, MBBS, DA¹, Rosalie F. Tassone, MD, MPH², Nathalia Jimenez, MD, MPH¹, Kristy Seidel, MS¹, Jessica K. Valentine, MD³, and Paul S. Pagel, MD, PhD⁴

¹Seattle Children's Hospital and University of Washington School of Medicine, Seattle, WA, USA

²University of Illinois Medical Center at Chicago, Chicago, IL, USA

³Swedish Family Medicine Residency, Seattle, WA, USA

⁴Anesthesia Service, the Zablocki Veterans Affairs Medical Center, Milwaukee, WI, USA

Abstract

The authors conducted an Email survey of their medical staff to explore the attitudes, patterns of recommendation, and communication of pediatric providers about complementary and alternative medicine (CAM) in a large metropolitan children's hospital. Two thirds of the respondents reported awareness about their patients' CAM therapy use (65%) and recommended CAM therapy to their patients (67%). Providers who reported personal use of CAM (71%) were more likely to recommend CAM to their patients compared with those who do not (76% vs 45%; $P < .05$). One half of pediatric providers reported occasional consultation with their patient's CAM provider, but bidirectional communication was rare (4%). Specific changes in care based on a CAM provider's recommendations were also unusual (4%). Despite the positive attitudes about and willingness to recommend CAM by pediatric providers, communication between these clinicians and CAM providers may be less than ideal.

Keywords

complementary; alternative; pediatric; conventional; awareness; communication; mind–body medicine; providers

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Corresponding Author: Anjana Kundu, Department of Anesthesiology and Pain Medicine, M/S W9824, Seattle Children's Hospital, 4800 Sand Point Way NE, Seattle, WA 98105, USA, anjana.kundu@seattlechildrens.org.

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The authors have all made substantial contributions to conception and design of the study, acquisition of the data, analysis and interpretation of the data, writing the manuscript, or revising the article critically for intellectual content. All the authors provided final approval of the submitted version.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the authorship and/or publication of this article.

Introduction

Although varying definitions of complementary and alternative medicine (CAM) exist, the National Center for Complementary and Alternative Medicine at the National Institute of Health defines CAM as “a group of diverse medical and health care systems, practices, and products that are not generally considered to be part of conventional medicine.”¹ In pediatrics, 12% to 33% of patients or their families report experience with CAM for treatment of a variety of clinical conditions.^{2–8} Use of CAM may exceed 75% in pediatric patients with chronic medical conditions, including cancer and chronic pain.^{9–14}

The attitudes of health care providers about and experiences with CAM vary widely based on geographical location and patient characteristics.^{6–8,14–19} Some data suggest that providers may discourage patients from using CAM,²⁰ but a growing body of evidence suggests that practitioners are willing to discuss and implement CAM.^{15–19,21} Furthermore, specialty groups such as the American Academy of Pediatrics Section on Complementary and Integrative Medicine encourage active dialogue between practitioners and families regarding alternative therapeutic approaches. The American Academy of Pediatrics has also stated that “pediatricians and other clinicians who care for children have the responsibility to advise and counsel patients and families about relevant, safe, effective, and age-appropriate health services and therapies regardless of whether they are considered mainstream or CAM.”²¹ (pp. 1382)

Seattle Children’s Hospital (SCH) is a tertiary care pediatric hospital that provides primary and subspecialty care for Oregon, Washington, Wyoming, Alaska, Montana, and Idaho. Several CAM therapies are routinely available as adjunctive therapies to the patients seeking medical care at SCH, including mind–body medicine therapies (such as biofeedback, guided imagery, meditation, cognitive behavioral therapies), acupuncture, reiki, healing energy, therapeutic touch, yoga, prayer, and watsu. Despite a growing integration of CAM in mainstream medicine,²² the specific patterns of recommendation, communication, and coordination of care between conventional medical and CAM providers are unknown. We conducted a survey of the clinical providers credentialed by the medical staff office at SCH to assess the attitudes of clinical providers about CAM and to evaluate patterns of CAM recommendation and management of patients by conventional medical and CAM providers.

Methods

An Email survey was designed after obtaining approval from the institutional review board at SCH. The following 4 major areas were assessed: (1) attitudes toward CAM, (2) knowledge of clinical providers about patterns of CAM use by their patients, (3) knowledge regarding availability of CAM within the institution, and (4) concerns of conventional medical providers about CAM therapies. A final section of the survey also asked providers about their desire to have therapies available at our institution. The study population included the medical staff credentialed by the medical staff office at SCH (physicians and clinical psychologists). These providers are trained in conventional Western medical care. The survey was sent as a link through Email to all eligible participants (n = 851). Responses

were anonymous. Two reminder Emails, 1 week apart, were also sent to all staff members. The survey was closed after 2½ weeks.

Stata statistical software (StataCorp 2007, Stata Statistical Software, Release 10, College Station, TX: Stata-Corp LP) was used for data analysis. Descriptive statistics are presented. Responses are summarized as proportion estimates. Comparisons of proportion estimates between subgroups of respondents were conducted with the χ^2 test. A *P* value of <.05 was considered statistically significant.

Results

Demographics

Of 851 providers, 268 responded (32%). Among the respondents, 58% were physicians with primary practice at SCH (hospital based), 37% were primary care physicians (private practice pediatricians and pediatric hospitalists) affiliated with SCH, and 5% were other clinical providers (clinical psychologists). Of the respondents, 58% were men, and 79% were Caucasian. The largest percentage of providers (44%) were between 41 and 55 years of age, followed by 36% between 25 and 40 years old, and 21% older than 56 years. The mean time in practice for the group was 15.2 years, with a range of 1 to 40 years in practice (Table 1).

Attitude Toward CAM

The majority (65%) of respondents reported that they were aware that their patients had previously used or were currently using some form of CAM therapy. More than two thirds (70%) also reported that their patients inquired about some form of CAM therapy during the past 6 months. Nearly all the providers (94%) reported that they discuss CAM therapies with their patients at least some of the time. Two thirds of the respondents had recommended some form of CAM therapy to their patients during the past 6 months. There were no significant differences (*P* > .05) in the CAM attitudes or recommendations between the SCH-based physicians and primary care physicians in private practice or pediatric hospitalists affiliated with SCH.

Patterns of Recommendations

Respondents described biofeedback as the most frequently recommended CAM therapy (42%). Acupuncture (33%), massage (33%), relaxation (33%), yoga (23%), guided imagery (21%), meditation (14%), spiritual practices (10%), and prayer (8%) were also reported with decreasing frequency (Figure 1). A small number (8%) of providers recommended the use of biological-based CAM therapies (herbal medicines).

Personal Use of CAM

A total of 71% of conventional medical providers reported personal use of CAM therapy during the previous 6-month period. Massage was the most commonly used CAM approach among providers (39%), followed by relaxation (32%), yoga (31%), prayer (19%), meditation (18%), and acupuncture (16%); 10% of providers also reported using herbal

medicines. Providers who reported personal use of CAM were more likely to recommend CAM therapies to their patients compared with those who did not (76% vs 45%; $P < .05$).

Patterns of Communication With CAM Providers

Approximately one half (53%) of conventional medical providers consulted their patient's CAM provider some (46%) or all (5%) of the time to discuss the care plan when their patient independently used CAM therapy. Notably, few (4%) conventional medical providers reported a consistent bidirectional communication with a CAM provider when both were simultaneously providing care to a patient. Similarly, few (4%) conventional medical providers reported altering care based on the recommendations of a CAM provider. Also, 32% of conventional medical providers reported that they did not receive any information from the CAM provider when a CAM therapy was recommended to a mutual patient. What was interesting was that most conventional medical providers (92%) reported that they proactively learnt about the effects and possible interactions of CAM with conventional medical therapy when their patients were using or inquiring about CAM. Most conventional medical providers (87%) also encouraged their patients and families to read about CAM therapy. Very few conventional medical providers (0.5%) advised their patients to cease CAM therapy while the patient was under their care (Tables 2 and 3).

Discussion

The current results indicate that many conventionally trained pediatric providers at a large metropolitan children's hospital are aware of the use of CAM therapies by their patients. Conventional medical providers also acknowledge that the majority of their patients inquire about CAM therapies. The current findings are consistent with previous results describing pediatrician awareness about and attitudes toward CAM use in their patients.^{17,19,23} The current investigation included pediatric subspecialists and primary care providers, and the results indicate that these groups receive similar numbers of CAM inquiries (70%) to those reported by the authors of previous studies 54%²³ and 80%¹⁷ involving pediatricians. Thus, the current data suggest that pediatric subspecialty providers are also aware of CAM use by their patients. The results further indicate that two thirds of our providers report having recommended some form of CAM therapy to their patients during the past 6 months. These respondents also reported a high personal use of CAM therapies. Indeed, providers reporting personal use of CAM were much more likely to recommend CAM therapies to their patients when compared with those who do not (76% vs 45%, respectively). This positive attitude may be attributed to the positive observation that conventional medical providers are frequently exposed to CAM. Mind-body modalities, acupuncture, and manual therapies were the most commonly recommended therapies, whereas herbal medicine use was recommended less often. The results are generally consistent with those previously described in pediatric patients.^{23,24} However, the current data about herbal medicine use contrast with those of previous reports in which the rates of herbal medicine use ranged between 12% and 53%.^{24,25} The reasons for this variation in herbal medicine use are unknown. Notably, the conventional medicine providers at SCH most often recommend biofeedback and acupuncture therapies to their patients. The reasons for these preferences are also unknown but may be related, at least in part, to support for these modalities in the

peer review literature, concerns about safety, the relatively higher risk of interactions of herbal medicine with conventional therapies compared with other CAM therapies, and local knowledge about the qualifications of the providers who perform these techniques in our institution.

Despite substantial awareness and personal use of CAM therapy, the current results suggest that bidirectional communication between conventional medical and CAM providers may be lacking in our institution. Incorporation of CAM therapy into the care plan also does not appear to affect the overall strategy by which our pediatric patients are managed under most circumstances. An important lack of communication between conventional and CAM providers was identified, because only 5% of conventional providers reported consistent discourse when they attempted to initiate such communication about patient care with CAM providers. A communication gap about CAM therapy use between patients and conventional medical providers has been previously documented.²⁶ To our knowledge, only a single report to date has studied communication patterns between licensed acupuncturists and conventional medical providers when they were providing simultaneous care to a patient.²⁷ These investigators reported that licensed acupuncturists discussed their patients' care plan with physicians in 50% of the cases when the patient was referred to them by a physician. However, such communication declined to 12% if patients referred themselves for acupuncture therapy while also pursuing conventional medical therapy. The current data suggest that communication between conventional medical providers and CAM providers may be less optimal than previously reported. This finding was surprising to us because most conventional medical providers reported learning about CAM therapies and counseling patients and their families to educate themselves about CAM. In addition, more than two thirds of the providers chose to recommend CAM therapy to their patients. The reasons for the gap in communication between conventional medical and CAM providers have not been explored but may represent fundamental differences in their training. Further study will be required to provide additional insight into this issue. Nevertheless, it should be abundantly clear that open communication between conventional medical and CAM providers is paramount for coordinated patient care. Because conventional medicine and CAM use diverse diagnostic and therapeutic tools in the parallel management of the same medical conditions,²⁷ consistent bidirectional communication between conventional and CAM providers should improve the knowledge of providers of both disciplines and enhance patient care. Such communication may also improve continuity of care for patients and thereby enhance patient satisfaction. Patients often express a desire for more active participation from their medical providers in directing their CAM therapies,^{28,29} and improved communication between conventional and CAM providers may be essential in achieving this goal.

The current results must be interpreted within the constraints of several potential limitations. The response rate of our survey (32%) was consistent with previous studies in which pediatricians were queried.²³ Nevertheless, response rates of physicians to surveys is often less than 50%.^{17,30} Both the inclusion of a full cross section of pediatric subspecialists and the short duration of survey availability (2½ weeks) may have contributed to the relatively low response rate observed here. The vast majority of surveys were completed by physicians because clinical psychologists, who may be more likely to encourage use of CAM therapy,

make up a small minority of our medical staff. It is also likely that nonresponders may be less likely to have a positive attitude about or routinely recommend CAM therapy compared with those who responded to our survey.

Conclusion

In summary, the results of the current investigation indicate that primary care and subspecialty pediatricians in a major children's hospital have positive attitudes toward CAM therapies. Not only are the majority of these providers aware of CAM use by their patients, but they also recommend CAM therapies to their patients and personally use CAM. The results further suggest that there is a positive relationship between personal CAM use by conventional medical providers and the likelihood that CAM therapies will be recommended for patient care. Nevertheless, communication between conventional medical and CAM providers was often suboptimal despite awareness of simultaneous use of CAM and conventional therapy by patients. These data suggest that CAM therapies may have gained more acceptance in mainstream conventional medicine, but they are yet to penetrate the professional culture in the hospital setting. Further studies will be required to examine the reasons why such communication barriers exist between the providers of these modalities.

Acknowledgments

We gratefully acknowledge the Members of Complementary and Integrative Medicine Subcommittee, Seattle Children's Hospital, for their valuable input during the design of the survey.

Funding

This work was entirely supported by the departmental funds.

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Figure 1.

Patterns of recommendations of CAM therapies
Abbreviations: CAM, complementary and alternative medicine.

Table 1

Demographics

Characteristics	n (%)
Gender (n = 265)	
Male	153 (57.7)
Age (years; n = 266)	
25–40	95 (35.7)
41–55	116 (43.6)
56	55 (20.7)
Profession (n = 263)	
MD/DO/DDS primarily at SCH	153 (58.1)
MD/DO/DDS affiliated with SCH	98 (37.3)
Clinical psychologists	11 (4.2)
Other (not specified)	1 (0.4)
Years in practice (n = 252)	
Mean (minimum-maximum)	15.2 (1–40)
Race (n = 265)	
Caucasian/White	209 (78.9)
Asian	28 (10.6)
Other ^a	28 (10.5)
Ethnicity (n = 265)	
Non-Latino	252 (95.1)

Abbreviations: SCH, Seattle Children's Hospital.

^a Other includes African American, multiple races, or did not wish to indicate.

Table 2

Patterns of Communication Between CAM Providers and Conventional Medical Providers

Provider Responses	n (%)
When your patients are using CAM therapies, how do you co-manage/communicate their treatment plan with the CAM provider	
I receive and send progress report to the CAM provider	7 (3.6)
I send progress report to the CAM provider but do not receive information	6 (3.3)
CAM provider does not send me any information	61 (32.1)
I receive information from the CAM provider and alter care based on it	7 (3.6)

Abbreviations: CAM, complementary and alternative medicine.

Table 3

Patterns of Co-management Between CAM Providers and Conventional Medical Providers

Provider Responses	Always, n (%)	Occasionally, n (%)	Total, n (%)
When your patients are reporting use of CAM therapies, how do you proceed with their treatment plan?			
I discuss it further only with the patient	100 (44.1)	115 (50.7)	215 (94.8)
I contact the CAM provider and discuss the treatment plan	12 (5.4)	106 (47.5)	118 (52.9)
I receive information from the CAM provider and do not make any alterations in care	20 (10.4)	98 (51)	118 (61.4)
I advise patients to stop CAM therapy while under my care	1 (0.5)	84 (38.4)	85 (38.9)
I advise patients to read or inquire more about the CAM therapy	78 (35.3)	114 (51.6)	192 (86.9)
I read/inquire about effects/interactions with current treatment	70 (30.6)	141 (61.6)	211 (92.2)

Abbreviations: CAM, complementary and alternative medicine.