

# Patient Disclosure of Complementary and Integrative Health Approaches in an Academic Health Center

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## Abstract

**Background:** Effective patient–doctor communication about complementary and integrative health (CIH) is crucial to coordinate multimodal treatment for complex conditions. While rates of patient disclosure of CIH use to physicians have increased in the United States over the last 30 years, many patients still do not disclose these facts. Integrating CIH approaches within academic medical centers may enhance the communication, but this has not been explicitly studied.

**Objective:** To examine rates of patient disclosure of CIH to physicians and reasons for nondisclosure.

**Methods:** We surveyed 1177 patients at an academic center’s CIH clinic regarding their CIH use and disclosure of CIH use to their physician.

**Results:** Of the 1067 who responded to the disclosure questions, 80.1% had discussed their CIH use with their physician, while 19.9% did not. Of those who did not disclose, lack of physician inquiry was reported by 58% as the principal reason.

**Discussion:** Within an academic center, there is still a need to improve communication about CIH use. Possible strategies might include continued education of both patients and physicians about CIH and communication skills and integration of CIH disclosure into routine patient health questionnaires.

## Keywords

complementary and alternative medicine, integrative medicine, patient disclosure, patient–doctor communication

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## Introduction

Given the increasing use of complementary and integrative health (CIH) approaches in the United States and worldwide,<sup>1,2</sup> it is essential for physicians to discuss CIH use with their patients. Higher levels of patient disclosure of CIH use inform optimal and integrated patient-centered care and minimizes the chance for adverse interactions with other therapies. According to the 2012 National Health Interview Survey, about one third of U.S. adults used at least one CIH modality in the past 12 months, including natural products, chiropractic, and mind–body therapies. However, only 57% of those surveyed discussed their CIH use with their conventional provider.<sup>1</sup> While reported levels of disclosure in 2012 were notably higher than those reported in earlier national surveys (eg, 38.5% and 39.1% in 1997

and 2002, respectively),<sup>3,4</sup> there remains a gap between patient use and discussion of CIH, with the absence of physician inquiry about CIH use remaining a primary reason for lack of disclosure.<sup>1</sup>

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Integrating CIH approaches within academic medical centers has been suggested as a way to increase communication but has not been evaluated in terms of the effect of such integration on patient disclosure of CIH use. We report the results of a survey of new patients at an CIH medical clinic in an academic medical center regarding their disclosure of CIH use and reasons for nondisclosure.

## Methods

This study took place at the Osher Clinical Center (OCC) for Complementary and Integrative Medicine at Brigham and Women's Hospital (BWH) and was approved by the Partners Healthcare Institutional Review Board. The OCC was begun in 2007 and is located within the Ambulatory Care Center of BWH in Boston, a Harvard Medical School-affiliated hospital. In the OCC, all CIH therapies take place alongside conventional care and the OCC team is trained to deliver coordinated care.<sup>5</sup> This study was conducted from May 16, 2011 through October 22, 2014. Each new patient to the OCC was sent a survey to complete before their first visit.

The survey included 23 questions about prior CIH use, main reason for coming to the OCC, referral source, and communication about their CIH use. Patterns of communication and reasons for not discussing CIH use were summarized only for respondents who indicated having used CIH within the past 12 months. Respondents were asked whether they "discussed all or most," "discussed some," or "did not discuss" their past 12-month CIH use with their conventional provider. For this analysis, answers for "discussed all or most" and "discussed some" were combined. Those who answered "did not discuss" were asked to indicate all the reasons why they did not disclose their CIH use.

## Results

A total of 1537 patients were seen for the first time in the OCC during the study period; 1509 of these (98%) completed the survey. Of these, 1177 patients indicated having used CIH within the past 12 months and formed the basis of the analysis. As shown in Table 1, the study population was mostly female with higher socioeconomic status. One half of the participants were referred to the OCC by a conventional provider, and the main reasons for coming to the OCC were back and neck pain and other musculoskeletal concerns.

Of the 1067 patients who responded to the questions about CIH use disclosure, 80.1% reported that they had discussed and 19.9% reported that they had not discussed their CIH use with their conventional care provider. Of those who did not disclose (n = 212), more than

**Table 1.** Characteristics and Disclosure Patterns of OCC Patient Population.

	n (%)
<b>Demographics</b>	n = 1177
Mean age in years (SD)	50.0 (15.8)
Female	890 (75.6)
White	1038 (88.2)
Income	
\$25K or less	110 (9.3)
\$25–50K	116 (9.8)
\$50–75K	138 (11.7)
\$75K or more	662 (56.2)
Education	
High school grad	42 (3.6)
College grad	343 (26.1)
Graduate degree	542 (46.0)
<b>Referral sources</b>	n = 1177
CIH provider	85 (7.2)
Conventional medical provider (eg, physician, nurse, physician assistant, physical therapist)	588 (50.0)
Family/friend/patient	191 (16.2)
Insurance	2 (0.2)
Self	196 (16.7)
Other	7 (0.6)
Missing	108 (9.2)
<b>Main reasons for visit to OCC<sup>a</sup></b>	n = 1177
Back or neck pain	724 (61.5)
Joint pain	252 (21.4)
Headache	217 (18.4)
Other musculoskeletal or neurological problem	303 (25.7)
Anxiety/depression	226 (19.2)
Insomnia	130 (11.0)
Fatigue	306 (26.0)
GI symptoms	139 (11.8)
Cancer palliation	25 (2.1)
Prevention/wellness/health promotion	198 (16.8)
Other	209 (17.8)
<b>Communication with conventional provider about past 12-month CIH use</b>	n = 1067
Discussed all, most or some of these therapies	855 (80.1)
Did not discuss any of these therapies	212 (19.9)
<b>Why did you not discuss use of complementary therapies with the provider?<sup>a</sup></b>	n = 212
Conventional provider never asked	123 (58.0)
Conventional provider would not understand	26 (12.3)
Conventional provider would discourage use	19 (9.0)
Conventional provider would disapprove	11 (5.2)
Did not think it was important for conventional provider to know	48 (19.0)
Did not think it was conventional providers business	4 (2.0)
Conventional provider might not continue as your provider	3 (1.0)
Other	
• N/A (has not seen provider)	24 (11.3)
• No reason	3 (1.4)
• Insurance/cost	4 (1.9)
• Lack of timing	2 (0.9)
• Other	19 (9.0)

Abbreviations: CIH, complementary and integrative health; GI, gastrointestinal; N/A, not applicable; OCC, Osher Clinical Center; SD, standard deviation.

<sup>a</sup>Participants could indicate multiple answers; total percentage will be over 100%.

half indicated their main reason for nondisclosure was that the provider never asked (58.0%). Additional reasons included that they did not think it was important for provider to know (19.0%), provider would not understand (12.3%), and that they have not seen a provider yet (11.3%). Patients referred by a conventional provider tended to disclose more to their provider than those referred by other sources including self, family, friends, other patients, CIH providers, and insurance providers (79.6% and 66.5%, respectively).

## Discussion

These data address disclosure of CIH use among patients presenting at an academic medical center. Our survey, based at an academic center's integrative medicine (IM) clinic, found rates of disclosure (80.1%) higher than those reported in the most recent national survey (57% in 2012). Whether this observation of increasing disclosure is due to the location of the OCC within an academic center, to differences in population of the 2 surveys, or to changes over time cannot be determined by this study. In addition to in national surveys, disclosure patterns have also been reported in studies at primary care centers<sup>6,7</sup> and in specific patient populations,<sup>8</sup> such as low-income diabetes patients,<sup>9</sup> and women with HIV,<sup>10</sup> with varying rates of disclosure reported. Since our study at an integrative medical center differed from prior studies examining national, local, or targeted patient populations, our findings are difficult to compare directly. Findings of surveys conducted across a range of IM clinics based in academic centers are needed to evaluate possible benefits to disclosure rates due to colocalizing CIH and conventional programs.

However, there continues to be a substantial percentage of patients who utilize but do not disclose their CIH use to their providers (19.9%), and the reasons for nondisclosure, particularly lack of physician inquiry, remain the same as previous surveys.<sup>1</sup> Multiple initiatives have been in place since 1990 at Harvard Medical School and its affiliated hospitals related to CIH education, research, and care, yet patients continue to report that their doctor is not asking, or they believe CIH use is not important to discuss with their conventional providers.

In order to recommend appropriate patients for CIH and avoid potential adverse events, it is critical for physicians to be knowledgeable of any potential risk factors for a given therapy. For example, St. John's Wort, which is a commonly recommended nutritional supplement used to treat mild depression and anxiety, is known to reduce the effects of oral contraceptives and warfarin.<sup>11,12</sup> Conditions such as osteoporosis may present a relative or absolute contraindication to certain types of high-velocity spinal manipulative therapies.<sup>13</sup> Increased communication between physicians and patients could

also lead to more optimal care that integrates CIH modalities into multimodal therapeutic approaches. For example, clinical trials support integrating acupuncture into the management of cancer-related pain and nausea<sup>14</sup> and chronic musculoskeletal pain treatment,<sup>15</sup> and observational studies suggest that chiropractic care may complement conventional care for migraine headache.<sup>16</sup> Lack of communication could lead to missed opportunities for physicians to advise on CIH safety or to develop an integrated care plan.

To further assure safe and optimal patient care, we encourage continued training for physicians to inquire about CIH use and to integrate these discussions as part of routine care. Many medical schools have introduced curricula for their students to increase exposure to CIH modalities, and some hold regular CIH-related grand rounds and seminars. Knowledge obtained in these programs may encourage discussion about CIH and enhance patient-provider interactions. Including questions about CIH products and modalities in patient health questionnaires may also encourage patients to discuss their CIH use and remind physicians to ask about CIH use without increasing burden on time constraints.

In terms of limitations, this survey was not able to specify to which doctor or when patients disclosed their CIH use, nor which CIH modalities were disclosed. Additionally, generalizability about patient disclosure of CIH use is limited by the focus of this study within an academic IM clinic and the high prevalence of females with higher socioeconomic status in the study population. Finally, half of the patients in the study were referred by a conventional provider, which may have contributed to higher disclosure. However, the structure of the survey did not allow us to examine to which provider patients disclosed the use of CIH. These limitations highlight needs for further research regarding CIH disclosure including communication about specific CIH modalities and the effect of patient and provider demographics on disclosure.

In conclusion, while disclosure of CIH use has increased nationally over time, there is still a need for improved communication. By encouraging physicians to inquire about CIH use and educating both patients and physicians about CIH and communication skills, patient-provider communication about CIH may increase. Such an approach holds promise to make patient care safer, more effective, and more aligned with patient goals and values.

## Declaration of Conflicting Interests

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## References

- Jou J, Johnson PJ. Nondisclosure of complementary and alternative medicine use to primary care physicians: findings from the 2012 National Health Interview Survey. *JAMA Intern Med.* 2016;176(4):545–546.
- Romeyke T, Stummer H. Evidence-based complementary and alternative medicine in inpatient care: take a look at Europe. *J Evid Based Complementary Altern Med.* 2015;20(2):87–93.
- Eisenberg DM, Davis RB, Ettner SL, et al. Trends in alternative medicine use in the United States, 1990-1997: results of a follow-up national survey. *JAMA.* 1998;280(18):1569–1575.
- Chao MT, Wade C, Kronenberg F. Disclosure of complementary and alternative medicine to conventional medical providers: variation by race/ethnicity and type of CAM. *J Natl Med Assoc.* 2008;100(11):1341–1349.
- Eisenberg DM, Kaptchuk TJ, Post DE, et al. Establishing an integrative medicine program within an academic health center: essential considerations. *Acad Med.* 2016;91(9):1223–1230.
- Zhang Y, Peck K, Spalding M, Jones BG, Cook RL. Discrepancy between patients' use of and health providers' familiarity with CAM. *Patient Educ Couns.* 2012;89(3):399–404.
- Tarn DM, Karlamangla A, Coulter ID, et al. A cross-sectional study of provider and patient characteristics associated with outpatient disclosures of dietary supplement use. *Patient Educ Couns.* 2015;98(7):830–836.
- Foley H, Steel A, Cramer H, Wardle J, Adams J. Disclosure of complementary medicine use to medical providers: a systematic review and meta-analysis. *Sci Rep.* 2019;9(1):1573.
- Chao MT, Handley MA, Quan J, Sarkar U, Ratanawongsa N, Schillinger D. Disclosure of complementary health approaches among low income and racially diverse safety net patients with diabetes. *Patient Educ Couns.* 2015;98(11):1360–1366.
- Liu C, Yang Y, Gange SJ, et al. Disclosure of complementary and alternative medicine use to health care providers among HIV-infected women. *AIDS Patient Care STDS.* 2009;23(11):965–971.
- Jiang X, Williams KM, Liauw WS, et al. Effect of St John's wort and ginseng on the pharmacokinetics and pharmacodynamics of warfarin in healthy subjects. *Br J Clin Pharmacol.* 2004;57(5):592–599.
- Hall SD, Wang Z, Huang SM, et al. The interaction between St John's wort and an oral contraceptive. *Clin Pharmacol Ther.* 2003;74(6):525–535.
- Hawk C, Schneider M, Dougherty P, Gleberzon BJ, Killinger LZ. Best practices recommendations for chiropractic care for older adults: results of a consensus process. *J Manipulative Physiol Ther.* 2010;33(6):464–473.
- Dean-Clower E, Doherty-Gilman AM, Keshaviah A, et al. Acupuncture as palliative therapy for physical symptoms and quality of life for advanced cancer patients. *Integr Cancer Ther.* 2010;9(2):158–167.
- Cho YJ, Song YK, Cha YY, et al. Acupuncture for chronic low back pain: a multicenter, randomized, patient-assessor blind, sham-controlled clinical trial. *Spine.* 2013;38(7):549–557.
- Rist PM, Hernandez A, Bernstein C, et al. The impact of spinal manipulation on migraine pain and disability: a systematic review and meta-analysis. *Headache.* 2019;59(4):532–542.