

EVALUATION OF PROVIDER-DIRECTED COMMUNICATION STRATEGIES
REGARDING COMPLEMENTARY AND ALTERNATIVE HEALTH: AN INTEGRATIVE
REVIEW

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EVALUATION OF PROVIDER-DIRECTED COMMUNICATION STRATEGIES
REGARDING COMPLEMENTARY AND ALTERNATIVE HEALTH: AN
INTEGRATIVE REVIEW

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Abstract

Aim Identify health care provider-directed facilitators and barriers to successful patient-provider communication regarding complementary and alternative medicine, and synthesize the research evidence into succinct best-evidence strategies to generate optimum patient-provider dialogue.

Background Complementary and alternative medicine use is prevalent among U.S. consumers. However, consumers infrequently disclose their use, and providers inconsistently inquire about it. Currently, there is little guidance for a method on facilitating communication. In addition, no studies have synthesized the variety of factors that influence communication of this topic as a means to help identify potentially effective strategies for improving it.

Method. An integrative review of publications from 2000 to 2015. A five-stage methodological framework guided the data analysis.

Results Thirty-two qualitative and quantitative articles and literature reviews met inclusion criteria. All data extracted and include in this review supported two key domains of understanding, representing interpersonal and organizational characteristics.

Conclusion Findings indicated that successful communication about complementary and alternative medicine will not occur unless it is considered integral to the medical encounter, required by policies, and supported by appropriate resources.

Implications for Advanced Practice Nurses Conversations that include complementary and alternative approaches will support the core concept of patient-centered care and ensure the greatest level of patient safety.

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Background

According to the National Center for Complementary and Integrative Health (NCCIH) (2014), complementary and alternative medicine (CAM) includes healthcare approaches whose origins and uses are historically embedded outside of mainstream, conventional, or Western medicine. It encompasses an extensive diversity of practices and products that have become increasingly popular and accepted in the U.S. and worldwide. More than one-third of the U.S. adult population uses CAM, with a higher prevalence among populations dealing with chronic conditions or serious illness (Arthur, 2013; Clarke, Black, Stussman, Barnes, & Nahin, 2015; Peng, Adams, Subbitt, & Frawley 2014; Wanchai, Armer, & Stewart, 2010).

The majority of consumers who use CAM do so in conjunction with conventional practices, and efforts to meet this consumer demand are occurring on several levels of the healthcare system. Hospitals, health maintenance organizations (HMOs), and providers are incorporating CAM into their practices; insurance companies are covering certain CAM interventions; integrative medicine centers exist; and medical and nursing schools are adding CAM to their curriculum (Institute of Medicine [IOM], 2005).

Such initiatives to incorporate CAM into the healthcare system reflect a growing awareness that the existing care models no longer adequately meet the needs of consumers. Over time, the development of integrative health has emerged into the mainstream of healthcare. Integrative health is a holistic approach to health care that places the patient at the center of care and recognizes that many factors including physical, mental, and spiritual needs contribute to the overall health of the individual (Coulter, Khorsan, Crawford, & Hsiao, 2010).

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As the use of CAM has grown and efforts have been made toward integrative medicine, more attention is ultimately being given to whether patients and providers are discussing the topic of CAM with each other. Unfortunately, there is infrequent and often unproductive communication occurring between consumers and providers in the traditional healthcare setting (Davis, Oh, Butow, Mullan, & Clarke, 2012; Ge et al., 2013; Jong, van de Vijver, Busch, Fritsma, & Seldenrijk, 2012; Juraskova, Hegedus, Butow, Smith, & Schofield, 2010; Liu et al., 2009; National Institutes of Health [NIH], 2011; Peng et al., 2014). Consumers are reluctant to disclose their CAM use due to such reasons as a lack of inquiry by their health care provider, anticipation of their providers' disapproval, as well as the patient perception that their CAM use is either irrelevant to their conventional treatment, or use it as a means to maintain control over their treatment choices (Davis et al., 2012; Jong et al., 2012). Healthcare providers also inconsistently inquire about CAM use, rarely use evidence-based arguments for their stance on particular modalities, and few express whether CAM use would interfere with conventional treatments (Juraskova et al., 2010).

In the absence of discussion with health care providers, consumers turn to other sources of CAM information; most commonly including family and friends, the Internet, magazines, newspapers, books, radio and television (NIH, 2011; Peng et al., 2014; Wanchai et al., 2010). Much of consumers' independent efforts to obtain CAM information are permitted because the majority of CAM utilized involve self-care modalities that do not require any oversight or guidance of a health care provider (Clarke et al., 2015). However, despite these other resources, consumers still expressed feeling ill-informed about CAM and preferred to have a health care provider who inquired about

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CAM, offered advice, and if necessary referred to or collaborated with CAM practitioners (Jong et al., 2012; Peng et al., 2014).

The growing use of CAM suggests that consumers consider it relevant to their health. While there are some common rationales for CAM use, such as to enhance wellbeing, treat a specific illness, or manage side effects of conventional medicine, there are also unique reasons that reflect the patient's individual needs, beliefs, and circumstances (Arthur, et al., 2013; Greene, Walsh, Sirois, and McCaffrey, 2009; NIH, 2011; Wanchai, Armer, & Stewart, 2010). Inquiring about the use of CAM in patient-provider discussions goes beyond an exchange of information and safety monitoring. These discussions provide important insights into patients' level of understanding, priorities, and expectations regarding their health and wellness. Initiating open dialogue and considering preferences regarding CAM give providers the opportunity for clear information dissemination and encourage greater patient involvement that make healthcare recommendations personal and meaningful.

Purpose

There is a wealth of evidence that CAM communication between consumers and their traditional healthcare providers is insufficient (Davis et al., 2012; Ge et al., 2013; Jong et al., 2012; Juraskova, Hegedus, Butow, Smith, & Schofield, 2010; Liu et al., 2009; NIH, 2011; Peng et al., 2014). Opportunities to address patients' treatment options and support an informed decision-making process are often missed. However, despite encouragement to improve communication, there is little guidance on how to accomplish this goal. In addition, no studies have synthesized the variety of factors that influence CAM communication. The objective of this project was to identify the current facilitators

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and barriers to successful patient-provider communication regarding CAM, and evaluate research evidence of provider-directed strategies that positively influence communication with patients' use of CAM. Synthesis of best-evidence strategies was used to generate optimum patient-provider dialogue about CAM.

Method

The principal investigator conducted an integrative review to answer the following questions: 1). What are the facilitators and barriers to successful communication between providers and consumers about CAM and 2). What specific strategies support successful CAM communication between providers and consumers? To enhance the rigor and transparency of the review process, methods were guided by Whitemore and Knafl's (2005) methodological framework, consisting of five stages (problem identification, literature search, data evaluation, data analysis, and presentation). Given the complexity of factors that may influence patient-provider communication about CAM, the integrative review method provided a means to combine insights and practices related to CAM communication gathered from a variety of published sources. This review included quantitative, qualitative, mixed methods, and literature review studies to more fully understand the phenomenon of CAM communication.

Search Strategy

As the principal investigator, I searched the electronic databases: Medline, PubMed, CINAHL, Joanna Griggs Institute, Proquest Nursing, and Cochrane Library. Search terms included: complementary and alternative medicine, integrative health, patient-provider communication, communication, communication barriers,

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communication recommendations, communication skills training, evaluation of communication, and counseling. I then selected search terms using words and phrases derived from free text and subject headings related to CAM communication and yielded the most relevant literature. Initially, I reviewed titles and abstracts for relevancy, followed by review of the full text. An ancestry search, or review of the references lists of included publications followed. Included publications addressed CAM communication barriers, facilitators or recommendations between healthcare providers and consumers or patients, participants in the studies included healthcare providers. Study designs were then sorted as qualitative, quantitative, mixed methods, or literature reviews. The language was in English, and the date of publication was between the year 2000 and the present. The year 2000 was chosen for the earliest date of publication as this is when the Federation of State Medical Boards established guidelines regarding the standards and use of CAM within professional practices (IOM, 2005). Publications were excluded if they were not [written in English](#), if participants did not include healthcare providers, or they were not primary research studies (see Appendix A for inclusion criteria and rationale).

In the initial search, I identified a total of 1061 articles. I reviewed titles and abstracts to determine if the publication met the inclusion criteria. Despite mentioning of communication, I excluded the article if it did not specifically involve providers' communication with patients, the topic of communication was not CAM, or it did not specify barriers, facilitators, or recommendations for CAM communication. This initial evaluation resulted in 1014 publications being eliminated. After reviewing full papers, I excluded an additional 23 publications due to beliefs, perceptions, and practices about

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CAM not relating directly to communication or were neither primary or secondary research studies, such as position statements or periodicals. The reference lists of the remaining 24 publications yielded 9 additional articles meeting inclusion criteria, for a total of 33 publications included in the integrative review (see Appendix B for data search process).

Quality Appraisal

A critical appraisal determined the validity, reliability, and rigor of each study that met the original inclusion criteria. Critical appraisal tools offered by the Critical Appraisal Skills Programme (CASP, 2013) assessed the quality of each study in this review. CASP offers eight different critical appraisal tools based on the research study design being evaluated, reducing ambiguity and strengthening the review overall. Throughout the evaluation of methodological rigor, I examined such details as clear explanation of intervention methods, data collection and analysis. As a result of this appraisal, I excluded one publication by Frenkel and Borkan (2003) due to unclear data collection and unsupported summary of findings, resulting in a finalized list of 32 publications for the review.

Data Synthesis

To begin the synthesis of data from the primary studies, all findings were initially read thoroughly to obtain a basic sense of the information as a whole. Relevant data from each source was then extracted into an inclusion table and coded to predetermined conceptual classifications including barriers, facilitators and strategies for CAM communication (see Appendix C for inclusion table with classification of data). This provided succinct organization of the literature, allowing systematic comparison of the

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sources on specific issues, variables, or sample characteristics, as well as enhancing the visualization of patterns and relationships across all sources, serving as a starting point for interpretation.

After reflection on and abstraction of codes, I created preliminary subcategories according to similarities and distinctions found. Through constant comparison and reevaluation, I paired subcategories into discernable patterns, creating initial category schemes in which the grouped barriers, facilitators or promotional strategies could be labeled. I further compared and abstracted the categories, revealing the key domains that impacted CAM communication (see Appendices D and E). I verified these developed domains with the primary data sources as a final step to ensure accuracy of the review findings.

Results

Characteristics of Included Studies

The publications reflected a spectrum of methodological approaches including nineteen quantitative studies in the forms of descriptive, cross-sectional, pretest-posttest studies as well as a randomized crossover trial and a randomized control trial. Nine studies were qualitative, in the forms of semi-structured interviews, focus groups, observations, or a combination of methods, and four studies included literature reviews. Overall, the breadth of studies added strength to the research evidence.

Studies occurred in a variety of settings including university hospitals, family practice clinics, pediatric and women's care facilities, and specialty services, all within a variety of metropolitan, suburban, and rural communities. The majority of the studies originated from the United States; however, of these, one study by Kemper et al. (2002)

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recruited participants in Germany and Australia, and another included participants in Mexico (Munoz, Servin, Kozo, Lam, & Zuniga, 2013). Studies also took place in Israel, Australia, and Canada. Two were conducted in England, and one in Sweden. This assortment of study locations suggests that CAM use is being recognized worldwide as an emerging mainstream practice and efforts to discern communicating about it is a shared undertaking.

In all the studies reviewed, participants included a variety of health care professions, including general practice and family physicians, followed by oncologists, nurses, nurse practitioners and midwives, as well as [medical](#) residents, pharmacists and registered dietitians. Participants were predominantly Caucasian, with one study reporting a majority of Latino participants (Munoz et al., 2013).

This integrative review describes barriers and facilitators to healthcare providers' CAM communication with patients, as well as recommendations for improvement. The two key domains that emerged as major influences to CAM communication included (1) interpersonal characteristics and (2) organizational characteristics (refer to Appendices D and E).

Barriers and Facilitators to CAM Communication: Provider Characteristics

Interpersonal characteristics accounted for the largest number of barriers and facilitators to CAM communication in the articles reviewed. Key factors related to the health care provider's ability or readiness to discuss CAM with patients at this level included (1) the manner in which they communicated about CAM, (2) their attitudes and beliefs toward CAM, and (3) their knowledge about CAM and related resources.

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Manner of communicating. This category summarizes predominant actions performed by either the health care provider or the patient that directly impacted the ability to discuss CAM effectively. One of the most common barriers that impacted CAM communication was the providers' lack of acknowledgment when patients mentioned CAM use. Koenig et al. (2015), reported inattention or limited acknowledgment inhibited further conversation because of the providers' lack of verbal response or only giving a brief reply, such as "okay," to a patient's expressed interest in CAM or disclosure of use before shifting to another topic. One qualitative study by Broom and Adams (2009) also reported that while the risks involved with CAM use were a legitimate concern for health care providers to dissuade patients from using CAM, the manner in which they asserted their stance risked sounding dismissive and creating defensive responses in the patients to the point that they no longer trusted the provider. Examples included taking a personal stance without evidence-based support or prohibiting all CAM use without further explanation.

Another common barrier that surfaced in this review was the consumer's lack of disclosure about CAM use, even when asked by the provider (Maha & Shaw, 2007; Munoz et al., 2013). One provider explained that when the patient denies using CAM, "what else can we ask? Nothing can be mentioned" (Robinson, Lorence, Falinske, & Banarsee, 2012, p. 520). Some providers perceived unclear language may be a factor to this nondisclosure, explaining that the patient may not understand that the intent of inquiry is toward CAM, rather than allopathic therapies (Shelley, Sussman, Williams, Segal, & Crabtree, 2009).

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Despite the growing awareness of CAM use, health care providers still inconsistently inquire about it (Davis et al., 2012; Juraskova et al., 2010; Peng et al., 2014). However, many reported that they discussed CAM with patients as a result of the patient initiating the topic and they were compelled to address their request (Ben-Arye, Frenkel, & Ziv, 2004; Hall, Griffiths, & McKenna, 2012; Kaczorowski, Patterson, Arthur, Smith, & Mills, 2002; Maha & Shaw, 2007; Roberts et al., 2005). This suggests that the action of the patient initiating the topic is a facilitator for conversation. However, with consumers that view CAM and conventional treatment as unrelated entities or those that still fear disapproval by their provider, prevent complete dependency on patients to initiate discussion about CAM. Rather, this concept should serve as further encouragement for health care providers to introduce the topic of CAM, creating an environment that portrays to the patient that it does play a role in their health care and is worth discussing.

In order to promote such willingness to openly divulge CAM use, providers report that it is helpful to display an accepting and nonjudgmental demeanor toward the patient's disclosure or expressed interest in CAM. The point is not to encourage any CAM modality without thoughtfulness, but to positively acknowledge that the patient is taking an active role in [his/her](#) care. This action helps to foster open discussion and facilitate greater understanding of the patient's reasons for choosing CAM (Ben-Arye, Frenkel, & Ziv 2004; Schofield et al., 2010; Shelley et al., 2009).

Interestingly, providers who responded positively to patient disclosure were also more comfortable advising patients about CAM, and ultimately, more likely to inquire about its use (Flannery, Love, Pearce, Luan, & Elder, 2006; Givon, Liberman, Klang, &

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Kahan, 2003). Koenig et al. (2015) reported that a positive response encourages the patient to spontaneously disclose additional CAM use, as well as information related to treatment preferences and values. Schofield et al., (2010) went a step further in a recommendation for providers' acceptance of patient use of CAM where there is no or little evidence of physical harm. This notion would more likely support the patient-provider relationship, rather than the underlying scientific evidence of efficacy.

Conversely, providers who expressed uncertainty or skepticism towards CAM due to lack of scientific evidence acknowledged that their patients might view these encounters negatively and refrain from future CAM use disclosure. This in turn likely negatively impacted how much providers knew about their patients' treatment choices and self-care practices outside of their conventional care (Maha & Shaw, 2007; Munoz et al., 2013; Robinson et al., 2012; Shelley et al., 2009). However, regardless of the provider's perspective on CAM use, it is possible to have a productive discussion if the provider offers a rationale to assist the patient to make more informed decisions when considering the use of CAM. Providing explicit explanations of factors to consider such as safety, efficacy, mechanism of action, and cost may be used as an opportunity to inform patients on how to evaluate the risks and benefits of CAM in their health or treatment practice (Koenig, Ho, Yadegar, & Tarn, 2012; Koenig et al., 2015; Schofield et al., 2010).

Provider attitudes and beliefs. Providers' opinions about the concept of CAM also demonstrate challenges with discussing the topic objectively and openly with patients. One study described how some providers' broad skepticism toward CAM limited patient engagement by either universally discouraging use of all CAM modalities,

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or stating it was “not worth worrying or talking about” when it was considered irrelevant to care (Broom & Adams, 2009, p. 326). At the same time, the providers perceived a lack of willingness to listen on behalf of the patients as a barrier to good communication (Broom & Adams, 2009).

Generalized assumptions can lead to discrepant views between patients and providers about CAM, which foster misunderstandings and missed opportunities to provide patient-centered care. For example, patients and providers from one study by Richardson, Masse, Nanny and Sanders (2004) disagreed significantly on every reason for not disclosing CAM use. Eighty percent of the providers believed nondisclosure was due to patient fears of being discouraged or disapproval by the physician; however, patients more often attributed nondisclosure to their uncertainty of the benefits of the CAM modality (54.5%) and to the physician never asking (47.5%) (Richardson, Masse, Nanny, & Sanders, 2004). In another study, half of the physicians believed that patients were most likely to use a nurse as a source of information about CAM; however, patients reported family and friends, magazines and books as common resources before they utilized a health professional (Roberts et al., 2005). In addition, providers [who](#) underestimated the prevalence of CAM use among their patients were also less likely to inquire about it (Giveon et al., 2003; Shelley et al., 2009).

Another study demonstrated that not all decisions to discuss CAM can or should be based on one’s beliefs about CAM users. Sussman, Williams, and Shelley (2010) attempted to identify easily observable characteristics that might suggest that a patient is likely to use CAM; however, no reliable characteristics could be identified. Several

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providers were conscious of the limitation to identify CAM users, and rather than attempting to make distinctions, they stated, “the best way to find out is to ask” (p. 68).

Several studies reported that a provider’s lack of interest, belief that CAM was irrelevant to care, or lacked therapeutic value, had a significantly lower tendency to ask about its use (Giveon et al., 2003; Jong, Lundqvist, & Jong, 2015; Kaczorowski et al., 2002; Maha & Shaw, 2003; Munoz et al., 2013; Winslow & Shapiro, 2002).

Additionally, providers were reluctant to discuss CAM if they believed the therapy to be harmful or were concerned over potential side effects (Kaczorowski et al., 2002; Roth, Lin, Kim, & Moody, 2009). This was an interesting finding, as identifying potential side effects and interactions of any health care treatment choice is necessary to assess before considering its use and warrants discussion.

Another common issue among providers related to attitudes about CAM use is varying opinions about whether it is their responsibility to address it and to what degree. According to Janamian, O’Rourke, Myers, and Eastwood (2011), 40% of providers were unsure if they should get to know CAM practitioners in their area in order to better address CAM use by their patients. Jong et al. (2015) determined that 28.4% of providers did not consider it their responsibility to inquire about CAM, and in another study, 69% of physicians were undecided if it was their responsibility to advise their patients on CAM, answer CAM questions, or know of CAM practitioners (Suter, Verhoef, & O’Beirne, 2004). Others, however, were motivated by the belief in their role as a scientific expert and their commitment to “do no harm” compelled them to warn patients about concerns they may have about CAM practices (Shelley et al., 2009). Schofield et al. (2010) added that for safety of the patient, there are critical times in an illness

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trajectory that warranted inquiry about CAM use, including the commencement of a new treatment regimen, the patient is experiencing side effects, or has unusual test results.

Additional attitudes that facilitated the provider's likelihood of discussing CAM included a personal interest or use of CAM, belief in the efficacy of certain modalities, the conviction of holistic treatment and considering options that may have not yet been considered, or simply feeling comfortable discussing the topic (Flannery et al., 2006; Hall et al., 2013; Kaczorowski et al., 2002, Schofield et al., 2010; Winslow & Shapiro, 2002). Maha and Shaw (2007) supported this trend when they revealed that despite many skeptical providers within their sample, reasons for initiating CAM as a treatment option included the belief that a modality would "do not harm."

Provider knowledge of CAM. Recognizing the importance of effective communication and the need to fulfill their role as an educator to their patients, many providers have felt compelled to learn more about CAM. However, many still reported a lack of knowledge of or access to reliable information on the topic and its various modalities as a major barrier to successfully advising about CAM with their patients (Broom & Adams, 2009; Giveon et al., 2003; Janamian, O'Rourke, Myers, & Eastwood, 2011; Jong, et al., 2015; Kaczorowski et al., 2002; Roth et al., 2009; Shelley et al., 2009). While having advanced knowledge about CAM may not be necessary to initiate dialogue, several studies have demonstrated that providers do report an increased willingness to discuss CAM and in a more effective manner after having received some additional education or training related to the subject. A randomized control trial determined that a brief educational video could increase nurses' reports of CAM inquiry, as well as increase their comfort in discussing the subject with patients (Parker et al., 2013).

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Additional examples include introductory educational courses led by a variety of accredited CAM practitioners that entailed both experiential and objective CAM information. Participants reporting increased attentiveness to and inquiry about CAM usage. This approach, as well as an integrative treatment program described in a pilot study, also increased providers' awareness of the psychosocial aspect of the clinical encounter, which was viewed by patients as an important component to CAM use (Ben-Arye & Frenkel, 2004; Ben-Arye, Frenkel, & Ziv, 2004; Ben-Arye, Frenkel, & Hermoni, 2006). Despite previous background or exposure to CAM information, providers also had significant improvements in knowledge, confidence, and communication practices after completing an internet-based education program (Kemper et al., 2002).

On occasion, providers may fail to utilize available information, thereby, impeding their ability to deliver it to their patients. For example, in one study, a majority of providers were either unaware of (42%) or did not use (35%) the Cochrane Collaboration Library, a recognized evidence-based resource. Furthermore, only 24% reported using PubMed regularly for CAM information (Suter et al., 2004). In contrast, providers who utilized CAM practitioners as a resource, accessed academic and online resources, or shared knowledge with patients and with their fellow allopathic health care providers felt they were able to successfully address their information needs, contributing to their ability to consult with patients about CAM (Hall et al., 2013; Kaczorowski et al., 2002). Boddy and Ernst (2008) and Kiefer, Shah, Gardiner, and Wechkin (2001) also identified a wide spectrum of evidence-based resources related to CAM that providers may utilize to provide basic counseling to their patients. Resources included websites, online databases, medical journals, integrative medicine organizations, books and

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monographs. Overall, findings suggest that professional development in terms of knowledge and resource utilization is an ongoing struggle among providers wishing to enhance CAM communication with their patients. This is likely due to the extreme variability of evidence quality within a vast amount of information available on CAM, and health care providers need to be certain that the information they are retrieving is accessible and reliable.

Barriers and Facilitators to CAM Communication: Organizational Characteristics

While organizational dynamics were not as commonly reported, these factors helped to explain why some providers still struggled with CAM communication despite their personal interest, level of knowledge, or recognition of the positive impact it had on patient care. This theme embraced two categories; (1) work environment and (2) policies and tools.

Work environment. Occasionally, the prevailing ethos of the work environment impacted the manner in which the individuals within it performed and documented CAM counseling. Broom and Adams (2009) reported that while most providers agreed that CAM education was a priority for improving communication, those with the authority to arrange for action often could not determine resources needed and ultimately dismissed the option of having non-medically trained practitioners as educators or guest speakers. This limited the opportunities for those most interested in improving discussions about CAM.

Providers also reported conflicting perspectives within their working environment that challenged their ability to effectively discuss CAM with their patients. For example, midwives described that supporting a woman in her use of CAM was going against

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policy or viewed as “weird” by their colleagues (Hall et al., 2013, p.804). In order to avoid conflict, the provider was compelled to just discourage the patient from using CAM, avoided documentation if any recommendations were made, or encouraged the patient to seek advice from another health professional. However, attempts were also made to justify discussion by asserting that CAM had a valid role in maternity care, highlighting historical ties and identifying it as a part of holistic care. Sometimes, collective intentions among colleagues did allow for more open dialogue including a shared respect for the patient’s autonomy and to share the responsibility for decision-making (Hall et al., 2013).

The specialty in which a provider works also was a significant predictor of patient-provider communication about CAM. For example, family physicians and internists were significantly more likely to talk to their patients about CAM than pediatricians (Kurtz, Nolan, & Rittinger, 2003). A possible explanation for this difference could be attributed to the trend that adult patients are more likely to utilize CAM therapies than pediatric patients. This concept was supported by Robinson, Lorence, Falinski, and Banarsee (2012), when providers reported that so few of their pediatric patients reported using CAM that they had difficulty finding reasons to ask about it.

On occasion, despite widespread support for CAM discussion, the brevity of a conventional health visit left little time for dialogue. If CAM was discussed, it was typically only as part of the initial medical history (Hall et al., 2013; Jong et al., 2015; Robinson et al., 2012; Roth et al., 2009; Shelley et al., 2009). Competing priorities, such as a heavy workload and patients seeking advice on a range of issues, also resulted in providers forgetting to ask about CAM use (Robinson et al., 2012; Shelley, Sussman et

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al., 2009). However, practices that utilized reminders, such as emails sent to the provider, had a higher tendency of asking about CAM. Other suggestions included an alert when booking patient appointments, a screen message on all desktops, or paper reminders stuck to computers (Robinson et al., 2012).

Policies and tools: Several studies reported that organizations lacked resources to support providers in their efforts to counsel patients about CAM; however, discrepancies between lack of resources and the provider's awareness of their existence were uncovered. Broom and Adams (2009) found providers often reported an absence of managerial discussions or frameworks as well as non-existing organizational policies for addressing CAM-related issues. In another study, 89% of providers reported that they had very few resources available to them outside of the Internet; however, 80% of them were not aware of a policy that existed at their facility that specifically addressed the use of invasive and ingested CAM therapies (Brown et al., 2007). These findings suggest that there may be a lack of commitment at an organizational level for policy implementation in terms of appropriate notification and education dissemination to the necessary affiliates.

When resources were available, they were sometimes limited and of little use. One study evaluated the utility of existing guidelines in providing CAM-related information and advice, in which all cases revealed brief, and at times unclear, inconclusive information that lacked direction. For example, a National Stroke Foundation (2005) guideline stated, "homeopathic interventions, however, may develop harmful interactions with certain medications and should be discussed with relevant health professionals" (p. 6). This statement is unclear about which homeopathic

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interventions may develop interactions, with which conventional medications, the nature of the reaction, and who is considered the relevant health professional, making it difficult to discern a point of action on behalf of the provider (Team, Rachell, & Lenorel, 2011).

Given the opportunity, providers in several studies were receptive to using information sources when they were made available to them. In one study 73% of providers reported using informational fact sheets about herbal medicine, and 90% expressed that if they had more adequate resources on CAM, like the fact sheets, they would communicate more with their patients about CAM (Janamian, Myers, O'Rourke, & Eastwood, 2011). In another study, a CAM referral tool (CRT) was found to be a valid and reliable method among primary care providers when considering the use of CAM with a patient (Ben-Arye & Frenkel, 2008). However, it is important to acknowledge that the type and level of resources needed among providers may vary depending on the setting, and a needs assessment may be an effective method in which to appropriately meet their unique preferences (Janamian, O'Rourke, Myers, & Eastwood, 2011).

Strategies for CAM Communication

Schofield et al. (2010) performed a systematic review that resulted in the most comprehensive list of evidence-based CAM communication recommendations directed at providers. As a result, many of the strategies came from this study. However, the barriers and facilitators identified from the other publications provided significant insight into the variety of factors to consider when communicating about CAM. The findings from this review provided meaningful support to the existing list of recommendations as well as offered necessary additions that had not yet been identified.

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Facilitators considered to be in the control of the provider produced the majority of the supportive strategies. Examples of provider controlled variables included asking open-ended questions about patient's understanding of CAM modalities, using reminders in the clinical setting to ask about its use, and providing rationale for one's stance or recommendations. In contrast, facilitators such as patients initiating the topic of CAM or having a positive attitude about CAM were not included in the strategies list, as these were not considered actions that the provider could consistently control or fully depend on for effective communication.

Two identified communication barriers were also included in the strategies list, as these were actions that the providers had the ability to avoid. These included, avoid using dismissive or critical responses to patient disclosure of CAM, as well as avoid making attempts to use observable characteristics to predict who uses such therapies. It was important to include these because dismissive conduct may lead to defensive consumer responses, distrust in the provider and future nondisclosure. In addition, providers often underestimate the prevalence of patients [who](#) use CAM and any trends among users that providers may use to identify them may be false or unreliable.

The final strategies include a general, introductory list of evidence-based resources that have been identified to meet the informational needs of providers. While this list is not exhaustive, it offers pertinent options that may be accessed in a variety of formats in order to meet the preferences of the provider. Books; however, were not included in the list due to those that were recommended were not published beyond the year 2000 and risked having outdated information.

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While evidence already exists that communication between patients and providers should be occurring, the method with which to successfully integrate the topic into current practice has been lacking. While CAM communication is a shared challenge among a variety of providers and settings, a consolidation of these factors had yet to be performed as a means to identify common barriers and facilitators.

This integrative review offers the current level of evidence available about factors that influence whether or not CAM communication occurs in the clinical setting and to what extent. Overall, the outcome of this communication depends on the alignment of a hierarchy of attributes (Appendix G) that begin at the level of the provider and extend into the organization in which they practice. In other words, the success of CAM communication requires the topic to be recognized as integral to the clinical encounter throughout the healthcare system.

The hierarchy begins with the health-care provider who is responsible for initiating the dialogue with each patient about the topic of CAM. By doing this, the provider utilizes an opportunity to explore patients' practices and expectations of CAM within their health regimen. Throughout the discussion, providers should remain a partner with their patient by sharing knowledge and concerns, while respecting the patient's autonomy in the decision-making process. In order to accomplish this task, the provider requires support from the organization to help direct such conversations with established policies, resources and tools to address educational needs and support final decision making. Finally, having dedicated leaders within the organization to provide CAM information and conduct or coordinate CAM education opportunities are necessary to familiarize providers with

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CAM modalities and network with CAM practitioners as a means to enhance the ability to discuss CAM knowledgeably, and when necessary refer to the most appropriate resources within the community. Ideally, when these attributes are established and practiced consistently, CAM communication has a meaningful outcome that results in improved patient-centered care.

Using the identified barriers and facilitators to communication, a synthesized list of best-evidence strategies was developed to overcome these barriers and utilize existing facilitators as a means to generate an optimum CAM communication toolkit (refer to Appendix H). Utilization of this toolkit is expected to assist in the alignment of these attributes and afford providers and practices a means with which to begin incorporating the topic of CAM into routine consultations. Based on the evidence of this review, the outcome of these discussions is expected to include better patient-centered care, support of shared informed decision-making, and an enhanced patient-provider relationship.

Discussion

Findings of this integrative review of the literature demonstrate that communication about CAM is influenced on two levels; individual and organizational. The individual factors described characteristics of the providers that significantly influenced their ability to successfully initiate dialogue and objectively provide advice about it. Additionally, the interactions that occurred between the provider and consumer equally demonstrated to have a direct impact on whether CAM is mentioned in a consultation and to what degree it is discussed. The organizational factors uncovered that policies, guidelines, and the prevailing ethos of the work environment also directed the way in which providers

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conducted their practice, despite any underlying beliefs or intentions toward CAM communication. After synthesizing these factors, best-evidence strategies directed at providers could be generated as a means to more effectively communicate with patients about CAM.

Strengths and Limitations

When considering the findings, several strengths and limitations are addressed. Incorporating studies with a wide range of healthcare settings and professionals increased generalizability of the review findings. Consistent results between these studies enhanced the external validity of the data collected (Grove, Burns, & Gray, 2013). The inclusion of qualitative studies allowed a greater depth of understanding of the phenomenon of CAM communication. Several studies reported randomized samples, however, the majority utilized self-select or convenience samples, risking biased responses of participants who may have already had an interest in the topic of CAM. In order to reduce the level of bias and strengthen the current level of evidence, more studies that utilize randomized sampling are warranted.

The exclusion of non-published and non-English publications may have also increased the potential for bias. Song et al. (2010) reported that the exclusion of non-English language studies risked bias in some research areas including CAM, and that published studies tended to report a greater treatment effect than those from the grey literature. This review did not include such studies due to time and resources to evaluate them were beyond the capabilities of this project.

While many of the CAM communication strategies were identified from Schofield et al. (2010), the synthesis of information from all publications helped validate the prior findings. This was important, as the original review focused on communication

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in oncology with findings based primarily on expert opinions and descriptive studies. This review builds on the Schofield et al. work by including a synthesis of qualitative and quantitative studies, including descriptive, correlational, cross-sectional, randomized crossover trial, and randomized control trial studies, as well as several literature reviews. This method added increased validity and generalizability of the findings on CAM communication strategies.

Conclusion

Providing patient-centered care is an ongoing process as the needs of patients continue to evolve. Over time, patients have become more active participants in their healthcare and are leading the way in incorporating CAM into their self-care regimens. This, in addition to the push for integrative health, has made CAM a mainstream subject throughout the healthcare system. However, healthcare providers have a responsibility to ensure patient safety and recommend that the most effective treatments be used in practice. The limited research on CAM modalities compared to conventional therapies makes balancing evidence-based practice with patient-centered care an even greater challenge. However, in order to sustain this goal, providers need to evolve as their patients do by incorporating CAM inquiry into patient interactions and organizations need to establish resources to support such efforts. Findings from this integrative review discovered that successful CAM communication will not take place unless it is considered integral to the medical encounter by the provider, applied by policies, and supported by appropriate resources. The benefits of these interactions include helping patients understand the process of treatment decisions, promote honest and complete patient disclosure of treatment practices and enhance patient-provider relationships (Hall et al., Koenig et al., 2012; Koenig et al., 2015; Maha & Shaw, 2007; Richardson et al.,

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2004; Schofield et al., 2010; Shelley et al., 2009). These should serve as motivators for providers to reevaluate the way in which clinical consultations take place and begin adopting new methods of communication with their patients.

Impact on Practice

Consumers most often choose CAM as a means of supporting self-care and maintaining a sense of control over their health; however, they are almost universally requesting guidance about CAM, suggesting a deficit in their self-care capabilities. Dorothea Orem states in her Self-Care Deficit Nursing Theory (SCDNT) that a self-care deficit exists when there are limitations in the person's knowledge or ability to decide or produce self-care to meet the requirements of their conditions (Orem, 1980). In the case of CAM, this limitation may be confounded by the vast variability of information that is available to the consumer, burdening them with unreliable expectations and worry (Boddy & Ernst, 2008).

Advanced practice nurses bring a holistic perspective through patient-centered care (Sangster-Gormley, Frisch, & Schreiber, 2013). Frenkel and Cohen (2014) explain that a fundamental aim of patient-centered care is empowering patients with the knowledge, support and resources needed to make informed decisions and to manage their health and wellness. Communication is the foundation of patient-centered care, indicating nurse practitioners play a central role in the process of improving patient wellness by incorporating the emotional, spiritual and cultural factors into their therapeutic process, and if desired by patients, includes communication about CAM (Sangster-Gormley, et al., 2013). However, the current lack of CAM dialogue is a lost opportunity to fully understand and respect individual patients; ensure consistent recognition of potential interactions between CAM and conventional therapies; and identify potential CAM

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substitutions for conventional medicine (Brown et al., 2007). While nurses among other health care providers may not feel adequately prepared to address CAM use, identifying current barriers and facilitators is an essential step toward developing strategies to overcome this communication inadequacy. Employing communication strategies is warranted as a means for providers to more systematically inquire about CAM use and effectively address the unique needs of their patients while also ensuring their greatest level of safety.

Future Research

Future studies focused on provider-oriented interventions to improve knowledge related to CAM and effectively communicating about CAM use is warranted. The findings from many of the studies reviewed revealed providers requesting more education and training in order to improve and increase their communication with patients about CAM (Ben-Arye, Frenkel, & Ziv, 2004; Broom & Adams, 2009; Flannery et al., 2006; Kaczorowski et al., 2002; Winslow & Shapiro, 2002). A future review that incorporates unpublished and non-English studies is also needed to evaluate potential barriers and facilitators of CAM communication they may have contribute significant findings that support or conflict with this project (Song et al., 2010). In addition, more studies involving randomized controlled studies should be performed to increase the validity of these recommendations (Grove et al., 2013). Finally, studies should be performed that evaluate the applicability of the communications strategies tool to determine needs are being met successfully and in a variety of settings.

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Appendix A

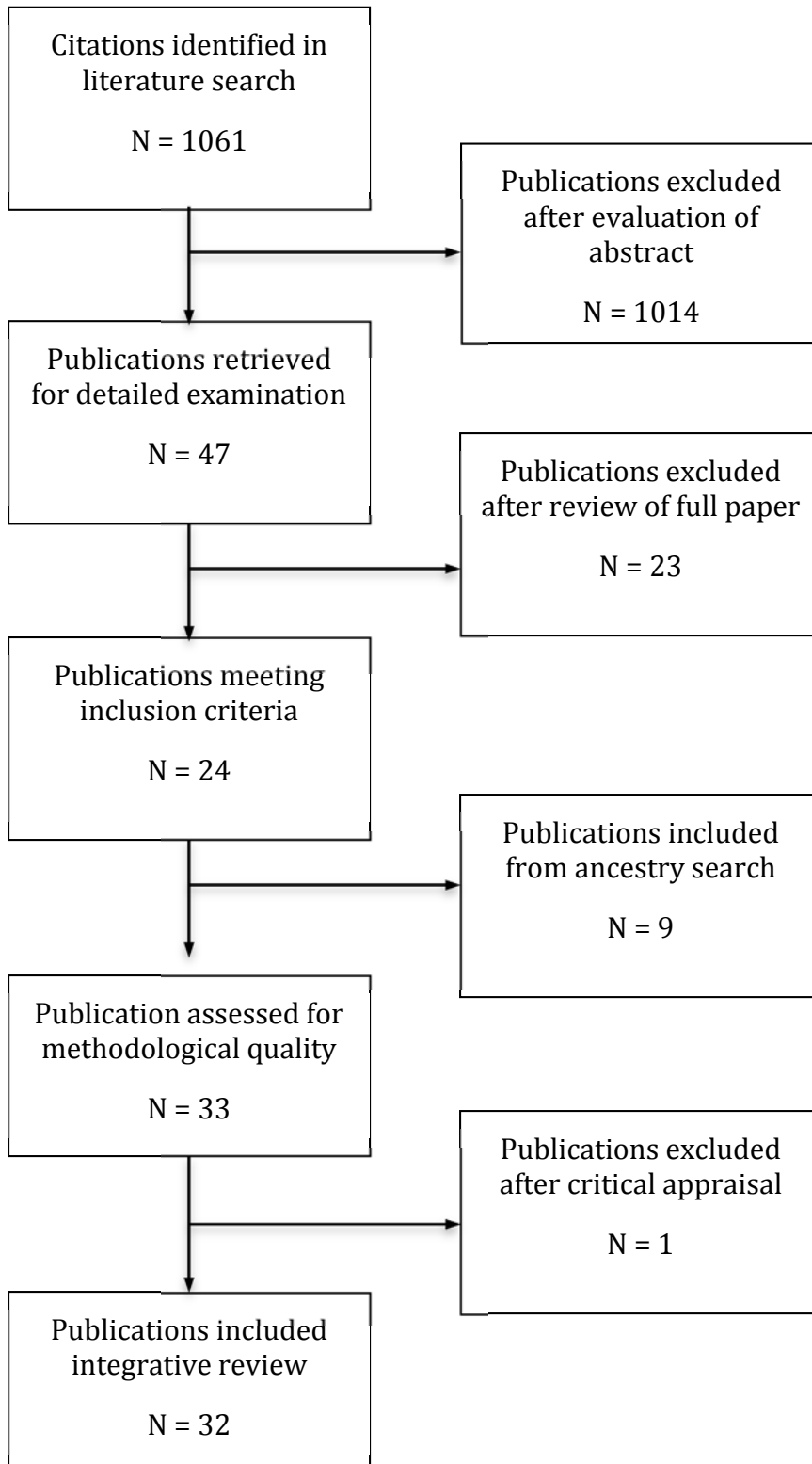
Inclusion Criteria and Rationale

Inclusion Criteria	Rationale
English text	Texts in languages other than English excluded due to lack of time and resources to translate
Published peer-reviewed quantitative and qualitative studies	Studies based on research support evidence-based information and peer-reviewed provides additional quality
Describes barriers or facilitators to patient-provider communication regarding CAM	The focus of study was to identify factors that impact CAM communication in the clinical encounter
Provides a clear description of the intervention model for CAM communication strategies	To determine whether the intervention is applicable and effective for enhancing CAM communication
Study participants include providers	Focus was to enhance provider CAM communication
Publication dates from 2000 to present	The year 2000 was when the Federation of State Medical Boards established guidelines regarding the standards of CAM use within professional practices

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Appendix B

Data Search Process



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Appendix C

Inclusion Table with Classification of Data

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Ben-Arye & Frenkel (2004) (Israel)	An approach to teaching physicians about complementary medicine in the treatment of cancer (Integrative Cancer Therapies)	Evaluate approach to teaching physicians and how to address patients' interest in CAM with an emphasis on patient-doctor communication	Quantitative; questionnaire, pretest-posttest design	N = 18 Setting: Family practice residency program Practice Areas: family physicians, oncology	94% reported more attentive to patients who inform them of their CAM after taking introductory educational course. Increased awareness of the biopsychosocial aspect of the clinical, increased inquiry about CAM usage, higher tendency to refer patients to CAM treatment, and viewed it as integral to management of a patient with cancer.	Facilitator
Ben-Arye, Frenkel, & Ziv (2004) (Israel)	An approach to teaching dermatologists about complementary medicine (The Journal of Alternative and Complementary Medicine)	Describe an approach to educating dermatologists and nurses about CAM in order to engage with patients who use CAM or request information about it.	Quantitative; questionnaire, pretest-posttest design	N = 11 Setting: University hospital Practice Areas: dermatology	Most prevalent reason for CAM referral was patient request, followed by feelings that conventional regimens ineffective. Majority (9/11) stated the bimodal (scientific aspect and psychosocial aspect) educational approach contributed to their understanding of patients who prefer to use CAM and would improve their communication with patients. Majority (9/11) stated an introductory course on CAM should be offered at clinics.	Facilitator
Ben-Arye, E., Frenkel, M., & Hermoni, D. (2006) (Israel)	An approach to teaching primary care physicians how to integrate complementary medicine into their daily practices: a pilot study (The Journal of Alternative and Complementary Medicine)	To describe a pilot educational approach for family physicians to integrate CAM into their routine practice	Quantitative; questionnaire, pretest-posttest design	N = 12 Setting: Department of Family Medicine Practice Areas: Family physicians and specialists	Integrative treatment program: Improved ability to formulate individualized treatment plan, increased competence in CAM treatment plans; increased skills in referring patients to CAM; increased interest in communicating with CAM Practitioners treating their patients; increased awareness of psychosocial aspects of clinical encounter. A 2 year follow-up revealed the approach had long standing results.	Facilitator

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Appendix C

Inclusion Table with Classification of Data (continued)

Author/year/country	Title (Source of Publication)	Study Purpose	Design/Analysis Method	Sample	Relevant Findings	Classification of Data
Ben-Arye & Frenkel (2008) (Israel)	Referring to complementary and alternative medicine-a possible tool for implementation (Complementary Therapies in Medicine)	Determine primary care providers' and CAM practitioners' attitudes towards CAM referral in the primary care setting and develop and validate a practical CAM referral tool (CRT) for PCPs.	Quantitative; questionnaire	N = 574 (333 PCPs and 241 CAM-Ps) Age: Mean: PCPs 47.7 CAM-Ps 40.2 Gender: PCPs: 58% men, 42% women. CAM-Ps: 59% women, 41% men. Practice Areas: outpatient clinics	The CAM referral (CRT) was found to be reliable. Its validity found significant for PCPs only.	Facilitator
Boddy & Ernst (2008) (US)	Review of reliable information sources related to integrative oncology (Hematology/Oncology Clinics of North America)	Provide an overview of reliable integrative oncology information from various resources to be utilized by providers and help them guide their patients	Literature Review, quality-control, DISCERN rating instrument	N = N/A (literature review)	Reliable resources (rated 4 out of 5 on the DISCERN rating instrument): Online Resources: National Cancer Institute's (NCI) website, National Center for Complementary and Alternative Medicine, Natural Standard (requires subscription), Allied and Complementary Medical Database, PubMed, The Cochrane Library Medical Journals: (general) Evidence-Based Complementary and Alternative Medicine, (specific) Integrative Cancer Therapies, (review) Focus on Alternative and Complementary Therapies Integrative Medicine Organizations: Office of Cancer and Alternative Medicine, World Health Organization, Society for Integrative Oncology, Consortium of Academic health centers for integrative medicine, International Society for Complementary Medicine Research, The Research Council for Complementary Medicine. Integrative Medicine Cancer Centers: Memorial Sloan-Kettering Cancer Center, MC Anderson Cancer Center	Recommendation

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Appendix C

Inclusion Table with Classification of Data (continued)

Author/year/country	Title (Source of Publication)	Study Purpose	Design/ Analysis Method	Sample Characteristics	Relevant Findings	Classification of Data
Broom & Adams (2009) (Australia)	Oncology clinician's accounts of discussing complementary and alternative medicine with their patients (SAGE Publications)	Identify oncologist and nurse approaches to discussing CAM with cancer patients	Qualitative, interviews; Interviews; Charmaz's approach to social analysis	N = 25 (13 oncologists, 12 oncology nurses Setting: Main hospital cancer centers Practice: Oncology	No organization policies/ managerial frameworks for CAM Responses to CAM highly variable; not evidence based Skepticism limited patient engagement: saying "no" universally to all CAM modalities, or "not worth worrying or talking about" when considered irrelevant to care Lack of staff education, knowledge, or reliable resources about CAM; perceived patient lack of willingness to listen Staff resistance to non-biomedical speakers/educators	Barriers
Brown, J., Cooper, E., Frankton, L., Steeves-Wall, M., Gillis-Ring, J., Barter, W., McCabe, A., & Fernandez, C. (2007) (Canada)	Complementary and alternative therapies: survey of knowledge and attitudes of health professionals at a tertiary pediatric/women's care facility (Complementary Therapies in Clinical Practice)	To identify barriers for health professionals to effective communication about CAM use by their patients and families	Quantitative, descriptive cross-sectional study; 19-item questionnaire	N = 304 (nurses, allied health professionals, physicians) Age: 36% 41-50, 33% 31-40, Gender: 89% female Setting: Tertiary pediatric/women's care facility Practice: pediatric, maternal newborn, women's health	Majority (65%) stated that they rarely or never ask about CAM use during their admission assessment of patients and families, and 78% reported that patients and family rarely, if ever initiated discussion about CAM with them. Many recognized that patients and families were uncomfortable raising the topic of CAM with them. Possible reason is "fear of being labeled as using quack-medicine." Most (80%) were not aware of a policy that existed about CAM that addresses the use of invasive and ingested CAM therapies	Barriers
Flannery, Love, Pearce, Luan, & Elder (2006) (US)	Communication about complementary and alternative medicine: perspectives of primary care clinicians (Alternative Therapies in Health and Medicine)	Investigate how clinicians in the Kentucky Ambulatory Network (KAN) communicate with patients about CAM and determine interest in additional education	Quantitative, survey, descriptive correlational study	N = 65 (physicians, NP, CNM, and PA) Gender: 60% male Years in Practice: 49% 15+ yrs, 51% <15 yrs Setting: Kentucky Ambulatory Network (KAN) Practice: primary care	Positive association between the number of CAM modalities clinicians used, belief in efficacy of some modalities and the number of CAM modalities they recommended to patients. Clinicians with a positive response to patient CAM disclosure were more comfort in advising and more likely to inquire about CAM use. Majority (70%) expressed interest in CAM education; motivators related to advising patients about CAM	Facilitators

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Appendix C

Inclusion Table with Classification of Data (continued)

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Giveon, Liberman, Klang, & Kahan (2003) (Israel)	A survey of primary care physicians' perceptions of their patients' use of complementary medicine (Complementary Therapies in Medicine)	To study the perceptions and attitudes of primary care physicians concerning their patients' use of complementary medicine.	Quantitative; descriptive correlational study; questionnaire	N = 150 Age: Mean 45.9 yrs Sex: 55% female Years in Practice: Mean 18.8 yrs Place of Grad: 31% Israel, 31% East Europe, 26% West Europe, 11% other areas Yrs in Practice: Mean 18.8 Practice: general/ family medicine.	Lack of interest, no knowledge of herbal remedies, feeling indifferent or bad when patients discussed CAM, or assumed low estimate of patient CAM use had significantly lower tendency to ask about use. Physicians satisfied when patients discussing CAM tended to inquire about it use more often. 32% declared qualify to practice CAM, but did not affect whether they inquired about CAM use. No significant difference was found between the tendency of physicians to question their patients about CAM use and the belief that herbal remedies do or do not produce side effects or interact with prescription drugs.	Barriers
Hall, Griffiths, & McKenna (2013) (Australia)	Navigating a safe path together: a theory of midwives; responses to the use of complementary and alternative medicine (Midwifery)	Explain the processes midwives engaged in when considering the use of complementary and alternative medicine by pregnant women	Qualitative; grounded theory	N = 25 (all midwives) Age: Range 20s to late 50s Years in Practice: Mean 16 yrs Setting: 1 private and 3 public hospitals in metropolitan area Practice Areas: All models of maternity care	Usually discussed CAM in response to women's request for information. Limits to CAM discussion: Paradigm clash between patient, other colleagues, unsupportive workplace; time constraints; need for evidence-based care (included experiential/intuitive understanding) CAM discussion permitted with: Recognition of patient's autonomy, responsibility for shared-decision making, or justified CAM therapies as opportunity to embrace a holistic approach Most addressed lack of knowledge by accessing academic and online resources as well as shared knowledge with patients and colleagues. Encouraged patients to seek advice from another health professional due to limited knowledge and their workplace environment	Barrier, Facilitator

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Appendix C

Inclusion Table with Classification of Data (continued)

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Janamian, Myers, O'Rourke, & Eastwood (2011) (Australia)	Responding to GPs' information resource needs: implementation and evaluation of a complementary medicines information resource in Queensland general practice (Complementary and Alternative Medicine)	Develop, implement, and evaluate a CAM information resource with hypothesis it will improve practitioners' knowledge of CMs, give them more confidence, and improve their communication with their patients about CMs.	Quantitative; posttest only design (pre-experimental)	N = 92 Age: 48.8% 35-44 years, 26.7% 45-54 years, 14.1% <34 years, and 10.5% 65+ Gender: 58.1% male, 41.9% female Setting: metropolitan and rural/remote areas. Practice Areas: General practice	86 out of the 92 used the fact sheets. 73% perceived the fact sheets as useful. 90% believed that if they had more adequate resources on CAM, like the fact sheets, they would communicate more to their patients about CAM. Third believed they questioned their patients about herbal medicine use, and discussed herbal medicine options more often than they usually would have. Providers mainly used the fact sheets to increase their knowledge, answer patient's questions and advise patients. Additional uses included recommending or prescribing the herbs to patients, showing the fact sheets to patients, or even making a copy for patients.	Facilitator
Janamian, O'Rourke, Myers, & Eastwood, (2011) (Australia)	Information resource needs and preference of Queensland general practitioners on complementary medicines: results of a needs assessment (Evidence-Based Complementary and Alternative Medicine)	To explore in a cohort of Queensland general practitioners' their attitudes to; knowledge about; and practice behavior regarding complementary medicines, and to identify their perceptions of need for information resources on CAM.	Quantitative, confirmatory study; survey	N = 463 Age: 36% 35-44 years, 29% 45-54, 17% <34, and 17% 55+ Sex: 62% male Setting: metropolitan and rural/remote areas Practice Areas: General practice	Only 12% perceived that they had adequate knowledge to be able to advise patients about CAM. 40% were unsure if they should get to know CAM practitioners in their area. Reported information needs to better advise patients included information on vitamins, minerals, and trace elements (93%), herbal medicine (90%), nutritional supplements (90%) and dietary interventions (88%). Most preferred evidence-based medicine information followed by pharmacological, toxicological, and clinical protocols. Top 5 ranked formats: fact sheets, booklet, journal, computer-based and workshops.	Barrier/ Recommendation

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Appendix C

Inclusion Table with Classification of Data (continued)

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Jong, Lundqvist, & Jong (2015) (Sweden)	A cross-sectional study on Swedish licensed nurses' use, practice, perception and knowledge about complementary and alternative medicine (Scandinavian Journal of Care Sciences)	To investigate the use, practice, perception, and knowledge of CAM among representative sample of licensed nurses in Sweden	Quantitative; cross-sectional descriptive study	N = 960 Age: Mean 45.5 years Sex 84.2% female Education: Basic nursing training up to doctorate Years in Practice: Mean 17.4 years Setting: Swedish Assoc. of Health Professionals	70% stated that they never or seldom asked patients about CAM use. Most prevalent reasons included lack of knowledge (50%), do not regard it as relevant (28.4%), not my responsibility (20.6%), or not enough time (7.8%). Some added legislation and uncertainty if they are allowed to inform about CAM. Having knowledge about CAM was shown to be significantly ($p < 0.05$) associated with a higher odds of respondents to ask their patients about CAM use.	Barriers

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Appendix C

Inclusion Table with Classification of Data (continued)

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Kaczorowski, J., Patterson, C., Arthur, H., Smith, K., & Mills, D.A. (2002) (Canada)	Complementary therapy involvement of physicians: implications for practice and learning (Complementary Therapies in Medicine)	To study physicians' current and desired clinical role functions within the complementary health paradigm, and their perceptions of the necessary educational programs to support them	Quantitative; descriptive study; questionnaire	N = 417 (115 family physicians, 302 specialists) Sex: 42.9% male Education: Mean graduation year: 1977. Setting: Hamilton Health Sciences, St. Joseph's Healthcare and the Department of Family Medicine at McMaster University	Most common reason for consulting patients about CAM was patient request, followed by belief in holistic tx; knowing complementary providers, no response to conventional therapy, no harm could result from therapy, or personal experience with services. Did not consult/refer: insufficient knowledge of complementary services (9.4% for chiropractic to 31.1% naturopathy); no therapeutic value (7.0% for acupuncture to 23.9% naturopathy); belief therapy may be harmful (11.1% for acupuncture to 27.2% naturopathy). Most believed they should increase their involvement in assessing and counseling about CAM therapies. Primary learning needs: scientific principles underlying complementary therapies; evidence related to efficacy; potential interactions between conventional and complementary medicine. Desired educational formats for receiving information varied considerably with continuing medical education (34.7%) and workshops (23.6%)	Barriers/ Facilitators
Kemper, K.J., Amata-Kynvi, A., Sanhavi, D., Whelan, J.S., Dvorkin, L., Woolf, A., Samuels, R.C., & Hibberd, P. (2002) (US)	Randomized trial of an internet curriculum on herbs and other dietary supplements for health care professionals (Academic Medicine)	To assess the impact of an Internet-based curriculum on health professionals' knowledge, confidence, and clinical practices related to herbs and dietary supplements	Quantitative; randomized crossover trial; survey	N = 537 (111 physicians, 46 pharmacists, 30 advanced practice nurses, and 350 registered dieticians) Race: 88% Caucasian Sex: 86% female	Internet-based education feasible and may have significant and sustained improvement in knowledge, confidence, and communication practices. The immediate group improved significantly more than did the waiting-list group on all 3 outcomes. Shortly after the waiting-list group received the curriculum, both groups scored significantly better than at baseline. Scores at the second follow-up were similar for the immediate group and waiting-list group for confidence and communication	Facilitator

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Appendix C

Inclusion Table with Classification of Data (continued)

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Kiefer, Shah, Gardiner, & Wechkin (2001) (US)	Finding information on herbal therapy: a guide to useful sources for clinician (Alternative Therapies in Health and Medicine)	To provide healthcare practitioners with a list of references for Western herbal therapeutics and providing basic counseling to patients on the subject	Literature review	N = NA (literature review)	Many quality resources are available, including books, websites, and monographs that provide general, evidence-based, clinically oriented sources of information on Western herbal medicine literature for primary care clinicians.	Recommendation
Koenig, Ho, Yadegar, & Tarn (2012) (US)	Negotiating complementary and alternative medicine use in primary care visits (Patient Education and Counseling)	To empirically investigate the ways in which patients and providers discuss complementary and alternative medicine (CAM) treatment in primary care visits	Qualitative; discourse analysis; audio recordings	N = 284 (28 providers [22 internal medicine physicians, 6 family medicine physicians], and 256 patients) Setting: Primary care	Providing a detailed explanation behind stance enables the patient to understand the basis behind the physician's recommendation and to take those reasons into consideration when making treatment decisions about CAM. This can include lack of general scientific evidence base, lack of knowledge about the modality or its ingredients, as well as clinical experience	Facilitator
Koenig, Ho, Trupin, & Dohan (2015) (US)	An exploratory typology of provider responses that encourage and discourage conversation about complementary and integrative medicine during routine oncology visits (Patient Education and Counseling)	To characterize how providers respond to patient mentions of complementary and integrative medicine (CIM) during routine oncology visits	Qualitative, exploratory, ethnographic study; observations	N = 223 (105 physicians, nurses, advanced practice nurses, fellows, and residents. 36 caregivers, 82 advanced cancer patient) Setting: Clinics within academic medical center Practice Areas: oncology	Responses that inhibited conversation occurred 26/59 (44%), included: Disattention (36%); unexpanded acknowledgement (9%) Responses that promoted conversation occurred in 33/59 (56%), included: Positive response promotes more information disclosure (15%); neutral stance (27%); negative stance (13%): Even though negative responses typically dissuade patients from CAM use, provider responses address patient preferences in ways that help patients to navigate overall treatment decisions.	Barriers/ Facilitators

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Appendix C

Inclusion Table with Classification of Data (continued)

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Kurtz, Nolan, & Rittinger, (2003) (US)	Physicians' attitudes and practices regarding complementary and alternative medicine (The Journal of the American Osteopathic Association)	Assess osteopathic primary care physicians' attitudes and practices regarding CAM	Quantitative; descriptive study; questionnaire	N = 423 Race: 93.2% Caucasian Age: 41.4% 46-59 years; Sex: 78.3% male Setting: Members of the Michigan Osteopathic Association Practice Areas: family medicine, internal medicine, pediatrics	The only significant predictor of Physician Patient Communication About CAM was specialty type, and family medicine and general internal medicine scores were higher than those for pediatrics.	Facilitator
Maha & Shaw (2007) (England)	Academic doctors' views of complementary and alternative medicine (CAM) and its role within the NHS: an exploratory qualitative study (BMC Complementary and Alternative Medicine)	To explore academic doctors' views of CAM and its role within the National Health Services (NHS), along with the rationales they give for those views.	Qualitative; exploratory study; interviews	N = 9 (8 general practitioners, 1 homeopathic doctor) No demographic details reported	Discussion rarely initiated by the doctor. Most only discussed CAM when a patient raised it up due to belief that CAM was not a priority within the consultation when the scientific evidence was not strong. If discussed, often took place after conventional options had first been discussed Reasons for offering CAM: offer a patient something that would "do no harm," patient request, another option not yet considered by the patient, and evidence-based. Reasons for not recommending CAM: lack of scientific evidence. All stated willingness to refer patients to CAM therapist if they requested it, but only "enthusiasts" would consider initiating the referral. Recognition that patients might be reluctant to disclose/request if they perceived provider skepticism, and communication about CAM will vary depending on the doctor consulted and degree to which they reveal their personal attitudes toward CAM	Barriers/ Facilitators

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Appendix C

Inclusion Table with Classification of Data (continued)

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Munoz, Servin, Kozo, Lam, & Zuniga (2013) (US)	A binational comparison of HIV provider attitudes towards the use of CAM among HIV-positive Latino patients receiving care in the US-Mexico border region (AIDS Care)	To understand US and Mexican provider beliefs, and perceptions surrounding CAM use among Latino patients, and to learn if and how CAM communication occurs	Qualitative; grounded theory, comparative descriptive study; interviews	N = 19 Race: 68% Latino, 16% Non-Latino White, 11% Korean/Japanese, 5% Greek Age: Mean: 45 Sex: 63% male Years in Practice (with HIV-positive patients): 41% 11-20 years, 37% 1-10 years Setting: HIV clinics, social service agencies	All San Diego and 1 Tijuana provider reported willingness to explore CAM use with their patients, but one concerned that if they said something negative about CAM use, the patient may lose trust and choose to discontinue ART Patients commonly do not disclose CAM use, even when asked. Possible reasons included fear of being judged and that they may think that "the doctor doesn't believe in it so why should I even open that box," lack of trust or fear of being judged. Do not routinely ask about CAM, either due to disinterest and just lack of proactivity	Barriers
Parker, et al. (2013) (US)	A multisite, community oncology-based randomized trial of a brief educational intervention to increase communication regarding CAM (Cancer)	To examine the efficacy of a brief educational intervention to increase the frequency with which oncology nurses ask their patients about CAM use.	Quantitative, RCT; pre-test/post-test; survey	N = 175 nurses Race: 96% white, 2.9% black, 0.6% Asian, 0.6% Hispanic Age: Mean: 45.14 Sex: 96.6% female Years in Practice: Mean = 19.76 Practice Areas: Oncology	Nurses reported more comfortable discussing CAM, more likely to ask patients about CAM, and report that they asked more of their last 5 patients about CAM than the control group. No significant effect noted for the percentage of patients in the clinic who indicated that they were asked about CAM at follow-up No change in the percentage if patients who initiated conversation about CAM at baseline versus follow-up in the intervention group.	Facilitator

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Appendix C

Inclusion Table with Classification of Data (continued)

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Richardson, Masse, Nanny, & Sanders (2004) (US)	Discrepant views of oncologists and cancer patients on complementary/alternative medicine (Support Cancer Care)	Understand reasons for the communication gap by comparing physicians and patients on perceived reasons for CAM use and nondisclosure of use, reactions of physicians to disclosure, and expectations for CAM	Quantitative; cross-sectional descriptive study; survey	N = 82 oncologists (42.7% medical oncologists and 24.4% surgeons) and 244 patients Sex: 79.3% male Years in Practice: Mean 11.9 years Setting: MD Anderson Cancer Center in Texas, 8 outpatient clinics Practice Areas: Oncology	Patients and physicians disagreed significantly on every reason for nondisclosure. Most physicians (80%) believed nondisclosure due to patient fears of being discouraged or disapproval of by physicians, fear that the doctor would not understand, would discontinue treatment, or that the doctor did not need to know. However, patients more often attributed nondisclosure to their uncertainty of the benefits (54.5%) and to physician never asking (47.5%).	Barriers
Roberts, et al. (2005) (US)	Patient-physician communication regarding use of complementary therapies during cancer treatment (Journal of Psychosocial Oncology)	To assess newly diagnosed cancer patients' and oncologists' communication practices with regard to complementary therapies	Quantitative. Cross-sectional descriptive study; survey	N = 79 physicians and 208 patients Age: Mean: 48.25 Gender: 74% male Years in Practice Mean: 16.33 years Setting: hospital or cancer center, private practice or group setting Practice Areas: medical oncology, radiation oncology, urology, surgery, multiple specialties	Most reported that if the patient brings up the topic they are very willing (36.7%) or willing (50.6%) to discuss it. Half of physicians believed that patients were most likely to discuss CAM with a nurse. Only 19% report that they or someone in their office routinely provides this information.	Barriers/ Facilitators

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Appendix C

Inclusion Table with Classification of Data (continued)

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Robinson, Lorence, Falinski, & Banarsee (2012) (England)	The challenges of facilitating primary healthcare discussion on traditional complementary and alternative medicine for childhood eczema: piloting a computerized template (Patient Education and Counseling)	To explore the issues and barriers around engaging primary healthcare providers in a research project, which focused on their discussion of TCAM for pediatric eczema within routine consultations, and whether the implementation of a computerized template facilitated such discussion.	Qualitative; focus groups	N = 27 (general practitioners, nurses, and practice managers) No demographic variables reported	Most HCPs expressed confidence in asking about TCAM, however, many did not routinely ask about TCAM Lack of consensus regarding their professional duty to discuss TCAM and to what degree. 3 felt that having a similar ethnic/religious background to patients encouraged disclosure. Few patients reported TCAM use when inquired about HCPs often forgot to use the template due to lack of time or competing priorities, uncertain of the template's purpose and utility, IT issues, or viewed the template as inappropriate for review appointments. When template was used, was considered a good source of information. Practices that used reminders to use the template had the highest rate of recording.	Barriers/ Facilitators
Roth, Lin, Kim, & Moody (2009) (US)	Pediatric oncologists' views toward the use of complementary and alternative medicine in children with cancer (Journal of Pediatric Hematology/Oncology)	Assess barriers to CAM communication in pediatric oncology	Quantitative, descriptive study; survey	N = 90 Race: 82% white, 8% Asian, 6% Hispanic, 1% black Sex: 59% male, Education: 88% graduated in US, 12% outside of US Years in Practice: 32% 10-20 years; 27% >20 years; 22% 5-10 years Setting: Members of academic institutions. Practice Areas: Pediatric oncology	Barriers to asking: 49% lack of time, 47% lack of knowledge. Uncomfortable discussing CAM: Lack of knowledge (93%), concern over potential harmful side effects of the therapy (56%)	Barriers

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Appendix C

Inclusion Table with Classification of Data (continued)

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Schofield, Diggins, Charleson, Marigliani & Jefford (2010) (Australia)	Effectively discussing complementary and alternative medicine in a conventional oncology setting: communication recommendations for clinicians (Patient Education and Counseling)	To develop evidence-based guidelines to assist oncology health professionals to have respectful, balanced, and useful discussions with patients about CAM.	Systematic review	N = NA (literature review)	10 CAM Discussion Recommendations 1. Understand 2. Respect 3. Ask 4. Explore 5. Respond 6. Discuss 7. Advise 8. Summarize 9. Document 10. Monitor	Recommendations
Shelley, Sussman, Williams, Segal, & Crabtree (2009) (US)	"They don't ask me so I don't tell them:" patient-clinician communication about traditional, complementary, and alternative medicine (Annals of Family Medicine)	To compare perspective of patients and primary care clinicians on communication about TM/CAM, and to identify strategies for enhancing patient-clinician communication about TM/CAM.	Qualitative, exploratory study; focus groups, interviews, and video vignettes	N = 60 (41 clinic staff members and 19 primary care clinicians) and 114 patients Gender: 44 females Setting: Indian Health Service, Community Health Center, and Academic Practice Areas: family practice, pediatrics, internal medicine	An accepting and nonjudgmental attitude contributed to willingness by the patient to reveal use of CAM Lack of understanding of CAM limited discussions Motivators: Communicating respect for patient autonomy and culture; mechanism to enhance the patient-clinician relationship; commitment to "do no harm" and warn about concerns Would not initiate CAM conversation if did not perceive high levels of CAM use among patients. Poor phrasing limited patients' understanding that question was about CAM Competing demands for time limited when and how clinicians discussed CAM with patients. If asked about, typically only as part of the initial medical history. Lack of evidence often drove clinicians to use medical authority to dissuade patients from using CAM.	Barriers/ Facilitators

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Appendix C

Inclusion Table with Classification of Data (continued)

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Sussman, Williams, & Shelley (2010) (US)	Can we rapidly identify traditional complementary and alternative medicine users in the primary care encounter? A RIOS Net study (Ethnicity and Disease)	To determine if observable characteristics among southwestern Hispanic and Native American persons might suggest to the clinician that a patient is likely to use CAM.	Qualitative; Focus groups, interviews	N = 61 (42 clinic staff, 19 clinicians) and 93 patients Sex: 44 females Years in Practice: 14 had at least 10 years Setting: Indian Health Service, Community Health Center, and Academic Practice Areas: family practice, pediatrics, internal medicine	<ul style="list-style-type: none"> No easily observable characteristics were identified that clinicians might use to predict CAM use in their patients <p>Some clinicians, being conscious of the limitations of their efforts to identify CAM user, avoid attempts to make distinctions. "The best way to find out is to ask."</p>	Facilitators
Suter, Verhoef, & O'Beirne (2004) (Canada)	Assessment of the information needs and use of information resources on complementary and alternative medicine by Alberta family physicians (Clinical and Investigative Medicine)	To assess Alberta family physicians' knowledge in CAM, their interest in CAM information and the type of information sources they currently use.	Quantitative; cross-sectional study; Questionnaire	N = 346 Age: Mean: 52 Years in Practice: Setting: Members of the College of physicians and Surgeons of Alberta Practice Areas: Not reported	<ul style="list-style-type: none"> 69% agreed that physicians should be knowledgeable about the most important CAM therapies; however, they were undecided if it was their responsibility to advise their patients on CAM, answer CAM questions or know of CAM practitioners. Majority were either unaware of (42%) or did not use (35%) the Cochrane Collaboration, a recognized evidence-based resource. Only 24% reported using PubMed regularly. <p>Positive relationship between their knowledge about a specific CAM modality and their comfort level in discussing CAM with their patients.</p>	Barriers

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Inclusion Table with Classification of Data (continued)

Author (year) country	Title (Source of Publication)	Study Purpose	Design/ Data Collection and Analysis Method	Sample	Relevant Findings	Classification of Data
Team, Rachell, & Lenorel, (2011) (Australia)	Integration of complementary and alternative medicine information and advice in chronic disease management guidelines (Australian Journal of Primary Health)	To review current Australian guidelines for the prevention and management of T2DM and CVDs, to assess their utility in providing CAM-related information and advice.	Qualitative; content analysis	N = NA (literature review)	In all cases, the information provided on CAM was brief, at times unclear, inconclusive and lacking in direction.	Barriers
Winslow & Shapiro (2002) (US)	Physicians want education about complementary and alternative medicine to enhance communication with their patients (Archives of Internal Medicine)	To survey physicians to see how they discussed CAM with their patients and what factors influenced discussions and referrals	Quantitative, descriptive study; survey	N = 276 Race: 89% white, 11% other Age: 36% 39 years or younger; 35% 40-49 years, Sex: 63% male Education: 96% MD, 4% DO Setting: Members of the Colorado Medical Society Practice Areas: internal medicine, family medicine, pediatrics, OB/GYN, surgery, psychiatry, dermatology, radiology, and other	Majority infrequently inquired patients about CAM use. Determinants of physician discussion of CAM with their patients: More than 50% of physicians did not have a positive attitude about CAM when discussing it with patients and were not comfortable during the discussions. Linear association between an increasing comfort level in discussing CAM use with an increasing propensity to ask patients about their use of CAM. Most desired to learn more about CAM as a means to discuss with and answer patients' questions	Barriers / Recommendation

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Appendix D

Interpersonal Characteristics: Barriers and Facilitators to CAM Communication

Key Factors	Main Barriers Identified	Main Facilitators Identified
Provider's Manner of Communicating	<ul style="list-style-type: none"> Disattention and unexpanded acknowledgment (Brown et al., 2007; Koenig, Ho, Trupin, & Dohan, 2015). Consumers that do not disclose use to provider inquiry: (Maha & Shaw, 2007; Munoz et al., 2013; Robinson et al., 2012; Shelley et al., 2009). Unclear phrasing when inquiring (Shelley et al., 2009). Displaying skepticism or criticizing CAM (Maha & Shaw, 2007; Munoz et al., 2013; Robinson et al., 2012). 	<ul style="list-style-type: none"> Patient initiated topic of CAM (Ben-Arye, Frenkel, & Ziv, 2004; Hall et al., 2012; Kaczorowski et al., 2002; Maha & Shaw, 2007; Roberts et al., 2005). Responding positively to patient's CAM disclosure (Flannery et al., 2006; Giveon et al., 2003; Koenig et al., 2015; Schofield et al., 2010). Explaining rationale for stance on CAM (Koenig et al., 2012; Koenig et al., 2015; Schofield et al., 2010). Open, nonjudgmental approach demeanor (Ben-Arye, Frenkel, & Ziv, 2004; Schofield et al., 2010; Shelley et al., 2009).
Provider Attitudes and Beliefs	<ul style="list-style-type: none"> Belief that CAM is irrelevant or lacks therapeutic value (Broom & Adams, 2009; Giveon et al., 2003; Jong et al., 2015; Kaczorowski et al., 2002; Maha & Shaw, 2007; Munoz et al., 2013). Belief that discussing CAM is not considered the provider's responsibility (Janamian, O'Rourke, Myers, & Eastwood, 2011; Jong et al., 2015; Suter et al., 2004). Negative attitude toward CAM (Broom & Adams, 2009; Kaczorowski, et al., 2002; Roth et al., 2009; Winslow & Shapiro, 2002). Discrepant views toward CAM (Broom & Adams, 2009; Richardson et al., 2004; Roberts et al., 2005). Underestimated prevalence of CAM users (Sussman et al., 2010). 	<ul style="list-style-type: none"> Belief in commitment to prevent harm (Maha & Shaw, 2007). Interest in CAM and holistic outlook (Flannery et al., 2006; Hallet al., 2012; Kaczorowski et al., 2002; Maha & Shaw, 2007). Comfortable with discussing CAM (Schofield et al., 2010; Winslow & Shapiro, 2002). Provider belief in CAM efficacy and beneficial (Flannery et al., 2006; Kaczorowski et al., 2002; Winslow & Shapiro, 2002). Belief that only way to identify CAM users is to ask (Sussman et al., 2010).
Provider Knowledge about CAM	<ul style="list-style-type: none"> Provider lack knowledge about CAM (Broom & Adams, 2009; Giveon et al., 2003; Janamian, O'Rourke, Myers, & Eastwood, 2011; Jong et al., 2015; Kaczorowski et al., 2002; Roth et al., 2009; Shelley et al., 2009). Lack of reliable information available to refer to (Suter et al., 2004). 	<ul style="list-style-type: none"> Receiving CAM education (Ben-Arye & Frenkel, 2004; Ben-Arye, Frenkel, & Hermoni, 2006; Ben-Arye, Frenkel, & Ziv, 2004; Broom & Adams, 2009; Jong et al., 2015; Kemper et al., 2002; Parker et al., 2013; Winslow & Shapiro, 2002). Utilize variety of information resources: (Boddy, 2008; Hall et al., 2012; Kaczorowski et al., 2002; Kiefer et al., 2012).

Appendix E

Organizational Characteristics: Barriers and Facilitators to CAM Communication

Key Factors	Main Barriers Identified	Main Facilitators Identified
Work Environment	<ul style="list-style-type: none"> • Conflicting diverse perspectives about CAM (Hall et al., 2012). • Time constraints in clinical visit: (Hall et al., 2012; Jong et al., 2015; Robinson et al., 2012; Roth et al., 2009; Shelley et al., 2009). • Competition of Priorities (Robinson et al., 2012; Shelley et al., 2009). • Practice specialty observes few CAM users (Kurtz et al., 2003; Robinson et al., 2012). • Dismissive of CAM trained practitioners/educators (Broom & Adams, 2009). 	<ul style="list-style-type: none"> • Justify CAM as opportunity to provide holistic care (Hall et al., 2012). • Shared respect for patient autonomy and shared decision-making (Hall et al., 2012). • Use of reminders in the clinical setting (Robinson et al., 2012). • Critical times in patient’s condition where CAM inquiry warranted (Schofield et al., 2010).
Resources and Education	<ul style="list-style-type: none"> • Absence of policies for addressing CAM or lack of enforcement (Broom & Adams, 2009; Brown et al., 2007) • Unclear guidelines that lack in direction (Team, et al., 2011). • Few personnel dedicated to provide CAM information (Roberts et al., 2005). 	<ul style="list-style-type: none"> • Use of reference tools (fact sheets, CAM referral tool)(Ben-Arye & Frenkel, 2004; Janamian, Myers, O’Rourke, & Eastwood, 2011). • Identifying informational needs of the providers (Janamian, O’Rourke, Myers, & Eastwood, 2011). • Referral to another health professional or resource (Roberts et al., 2005).

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Appendix F

Synthesis of Provider-Directed CAM Communication Strategies

Identified Strategy	Supporting Details
Understand	<ul style="list-style-type: none"> • Elicit the persons’ s understanding of their situation to determine a direction about how to address the issue of CAM use (Schofield et al., 2010). • Ask open-ended questions to determine their understanding of their disease, any treatments to date, and decision-making preferences (Schofield et al., 2010). • Ask open-ended questions to gain understanding of their interest and use of CAM (Broom & Adams, 2009; Richardson et al., 2004, Roberts et al., 2005).
Respect	<ul style="list-style-type: none"> • Acknowledge mentioning of CAM use or requests for CAM information (Brown et al., 2007; Koenig et al., 2015) • Be aware of and respect diverse cultural, linguistic, and belief systems (Schofield et al., 2010). • Challenge stereotypes and remember individuals can step outside of their cultural circle (Schofield et al., 2010). • Adopt holistic outlook toward care (Hall et al., 2012). • Acknowledge patient’s autonomy to choose CAM as part of their healthcare (Hall et al., 2012). • Avoid using dismissive or critical responses to CAM use (Brown et al., 2007; Flannery et al., 2006).
Ask	<ul style="list-style-type: none"> • Avoid making assumptions about who uses CAM or reasons for using CAM (Broom & Adams, 2009; Giveon et al., 2003; Richardson et al., 2004; Roberts et al., 2005; Shelley et al., 2009). • Affirm the need to engage all individual about CAM to determine use (Giveon et al., 2003; Shelley et al., 2009; Sussman et al., 2010). • Ask questions about CAM use at crucial points in the illness trajectory: routine history, initial consultation, when there is significant change in condition, experiencing side effects or unexpected reactions, or unusual test results. (Schofield et al., 2010; Shelley et al., 2009). • Adopt an open-minded, non-judgmental demeanor (Ben-Arye, Frenkel, & Ziv, 2004; Schofield et al., 2010). • Inquire about CAM using appropriate language; the words complementary or alternative therapies may be interpreted differently by patients or may sound dismissive (Schofield et al., 2010; Shelley et al., 2009). • Clarify reasons for asking about CAM (Schofield et al., 2010).
Explore	<ul style="list-style-type: none"> • Explore details of CAM use to facilitate understanding (Schofield et al., 2010). • Inquire about the CAM they are using or considering, including reasons for using and what outcomes they are expecting (Schofield et al., 2010). • Ask what outcomes they are expecting from conventional treatment (Schofield et al., 2010). • Actively listen using eye contact, attentive posture, showing interest, and summarizing (Schofield et al., 2010). • Ask if they are using a provider for their CAM (if relevant), identify who this is and what their role will be in overseeing the CAM use (Schofield et al., 2010). • Ask about financial costs and/or the time commitments of using the CAM (Schofield et al., 2010). • Explore safety and efficacy evidence for the CAM (if relevant) (Schofield et al., 2010).
Respond	<ul style="list-style-type: none"> • Provide balanced evidence-based advice in relation to CAM (Schofield et al., 2010). • Consider explaining “Western” medical approach to evidence and explain that not many CAM have been through this testing procedure (Schofield et al., 2010). • Offer to help respond to advice from family and friends (Schofield et al., 2010). • Respond to the person’s emotional state, encourage them to express their feelings, and express empathy (Schofield et al., 2010). • Respond positively to CAM disclosure by support their reasons for using CAM, such as taking in active role in their care (Flannery et al., 2006; Giveon et al., 2003; Koenig et al., 2015; Schofield et al., 2010). • Provide rationale for stance toward CAM (Koenig et al., 2012; Koenig et al., 2015).

EVALUATION OF COMMUNICATION STRATEGIES

Appendix F

Synthesis of Provider-Directed CAM Communication Strategies (continued))

Discuss	<ul style="list-style-type: none"> • Balance role as health expert and educator by addressing relevant concerns about CAM while respecting the patient’s belief systems (Schofield et al., 2010; Shelley et al., 2009). • Discuss such concerns openly, which may include: substances with unknown effect and of unknown quality; financial or time commitment for CAM; potential psychological harm (Schofield et al., 2010). • Discuss a trial period (if determine reasonable), including what might be a reasonable timeframe to assessment benefit and efficacy (Schofield et al., 2010). • If trial agreed on, discussing use of a symptom diary to help determine benefit of therapy (Schofield et al., 2010). • Explore alternative ways of addressing the patient’s underlying needs, especially if there are concerns about CAM (potential for harm) (Schofield et al., 2010).
Advise	<ul style="list-style-type: none"> • Encourage use of CAM that may be beneficial and there is no evidence of physical harm, even if it conflicts with your views (Schofield et al., 2010). • Consider referral to a CAM practitioner (Schofield et al., 2010). • Discourage use of CAM where there is good evidence it will be unsafe or harmful, particularly if • Unproven or used in place of potentially beneficial treatment, especially potentially curative treatment (Schofield et al., 2010). • Practice shared-decision making and advise with an acknowledgment of the patient’s right for self-determination and autonomy (Hall et al., 2012; Schofield et al., 2010).
Summarize	<ul style="list-style-type: none"> • Summarize main points of discussion and check their understanding (Schofield et al., 2010). • Offer to talk to the CAM provider or other providers sharing in care, or family members (Roth et al., 2009). • Provide additional CAM resources from respected authorities (Schofield et al., 2010). • Provide opportunity to ask questions (Schofield et al., 2010).
Document	<ul style="list-style-type: none"> • Consider handing patient a signed document outlining the treatment recommendations that the patient has chosen the alternative therapy. Consider asking them to co-sign the document (Schofield et al., 2010). • Document the discussion about CAM, including final recommendations or plan. (Schofield et al., 2010). • Inform other members of the treatment team about the discussion, especially if CAM use has potentially risks. Include your perceptions of the person’s understanding (Schofield et al., 2010).
Monitor	<ul style="list-style-type: none"> • Follow-up discussion about CAM at the next consultation. (Schofield et al., 2010).
Learn	<ul style="list-style-type: none"> • Commit to increasing individual and staff knowledge about CAM and partake in CAM education opportunities (Ben-Arye, & Frenkel, 2004; Ben-Arye, Frenkel, & Hermoni, 2006; Ben-Arye, Frenkel, Ziv, 2004; Jong et al., 2015; Kaczorowski et al., 2002; Kemper et al., 2002; Parker et al., 2013). • Utilize evidence-based CAM resources (see below for resources) (Boddy, 2008; Hall et al., 2012; Kaczorowski et al., 2002; Kiefer et al., 2001). <p>Identify informational needs and preferences of organization to guide search for education and resources (Janamian, O’Rourke, Myers, & Eastwood, 2011).</p>
Organize	<ul style="list-style-type: none"> • Use reminders to promote CAM inquiry during consultation (reminder emails, notes on desktop screens) (Robinson et al., 2012). • Invest in CAM reference materials that may be applied in practice (Janamian, Kyers, O’Rourke, & Eastwood, 2011; Kaczorowski et al., 2002). • Dedicate personnel to provide CAM information (Roberts et al., 2005). • Create and enforce clear policies to support CAM communication efforts (Broom & Adams, 2009; Brown et al., 2007; Team et al., 2011).
Network	<ul style="list-style-type: none"> • Share knowledge with patients and colleagues to support informational needs (Hall et al., 2012). • Become familiar with CAM practitioners in the area for referral and resources (Ben-Arye & Frenkel, 2004; Ben-Arye, Frenkel, & Hermoni, 2006; Ben-Arye, Frenkel, & Ziv, 2004; Kaczorowski et al., 2002).

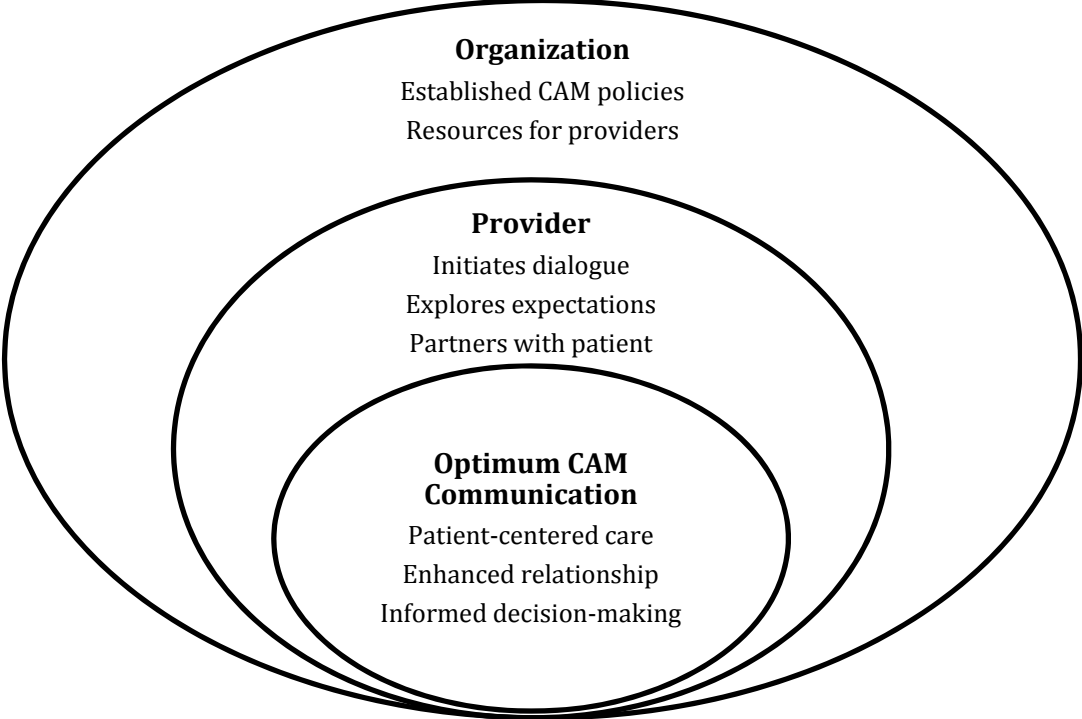
Appendix F

Synthesis of Provider-Directed CAM Communication Strategies (continued)

<p>Evidence-Based Resources</p>	<p>Online Resources:</p> <ul style="list-style-type: none"> • PubMed • Cochrane Collection Library • National Center for Complementary and Integrative Health (NCCIH) • Natural Standard (requires subscription) • Allied and Complementary Medical Database (AMED) • The National Cancer Institute’s (NCI) website <p>Medical Journals:</p> <ul style="list-style-type: none"> • Evidence-Based Complementary and Alternative Medicine • Focus on Alternative and Complementary Therapies • Integrative Cancer Therapies <p>Integrative Medicine Organizations</p> <ul style="list-style-type: none"> • World Health Organization • Consortium of Academic Health Centers for Integrative Medicine • International Society for Complementary Medicine Research • The Research Council for Complementary Medicine • Office of Cancer and Alternative Medicine <p>Monographs (material requires purchase)</p> <ul style="list-style-type: none"> • American Botanical Council, www://www.herbalgram.org • American Herbal Pharmacopeia, http://www.herbal-ahp.org • European Scientific Cooperative of Phytotherapy (ESCOP), www.escop.com <p>(Boddy, 2008; Kiefer et al., 2001).</p>
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Appendix G

Hierarchy Model of CAM Communication Attributes



Appendix H

CAM Communication Strategies Toolkit

CAM COMMUNICATION TOOLKIT

1. ASK: Consistently ask all patients about interest or use of CAM, particularly at crucial points during care: initial consultation, routine history, when there are significant changes in a condition, experiencing side effects or unexpected reactions to treatments, or unusual test results (Schofield et al., 2010; Shelley et al., 2009).

2. EXPLORE: If patient is using or interested in using CAM, inquire about their understanding, expectations, and commitment to using CAM, and when applicable, identify CAM practitioners to determine their role of overseeing care (Schofield et al., 2010).

3. RESPECT: Avoid using dismissive or critical responses to CAM use, and practice appropriate language during inquiry, “complementary” or “alternative” may be interpreted differently by patients or may sound dismissive. Try “are you taking any other medications or treatments” (Brown et al., 2007; Flannery et al., 2006; Schofield et al., 2010; Shelley et al., 2009).

4. ADVISE: Provide evidence-based advice in relation to CAM and provide rationale for stance (Koenig et al., 2012; Koenig et al., 2015; Schofield et al., 2010).

5. SHARE: Balance role as health expert and educator by addressing relevant concerns about CAM openly and advising with an acknowledgment of the patient’s right to self-determination and autonomy (Hall et al., 2012; Schofield et al., 2010; Shelley et al., 2009).

6. TRIAL: If reasonable, discuss a CAM trial period, including reasonable timeframe to assess benefit and efficacy; otherwise explore alternative ways of addressing patient’s underlying needs if potential harms exist (Schofield et al., 2010).

7. DECIDE: Encourage use of CAM that may be beneficial and there is no evidence of physical harm, and discourage CAM use if good evidence exists that it will be unsafe or used in place of potentially beneficial treatment, especially curative treatment (Schofield et al., 2010).

8. SUMMARIZE: Summarize discussion, offer opportunity to ask questions and provide additional CAM resources with respected authorities, which may include referral to a CAM practitioner (Schofield et al., 2010).

9. LEARN: Improve knowledge about CAM by utilizing evidence-based CAM resources, partaking in education opportunities, and investing in reference materials in practice (Ben-Arye, Frenkel, & Hermoni, 2006; Boddy, 2008; Hall et al., 2012; Janamian, Myers, O’Rourke, & Eastwood, 2011; Jong et al., 2015; Kaczorowski et al., 2002; Kemper et al., 2002; Kiefer et al., 2001).

10. SUPPORT: Create and enforce clear policies to support CAM communication efforts (Broom & Adams, 2009; Brown et al., 2007; Team et al., 2011).

Evidence-Based Resources

Online Resources:

- * PubMed
- * Cochrane Collection Library
- * National Center for Complementary and Integrative Health (NCCIH)
- * Natural Standard (requires subscription)
- * Allied and Complementary Medical Database (AMED)
- * The National Cancer Institute’s (NCI) website

Medical Journals:

- * Evidence-Based Complementary and Alternative Medicine
- * Focus on Alternative and Complementary Therapies
- * Integrative Cancer Therapies

Integrative Medicine Organizations

- * World Health Organization
- * Consortium of Academic Health Centers for Integrative Medicine
- * International Society for Complementary Medicine Research
- * The Research Council for Complementary Medicine
- * Office of Cancer and Alternative Medicine

Monographs (material requires purchase)

- * American Botanical Council, [www://www.herbalgram.org](http://www.herbalgram.org)
- * American Herbal Pharmacopeia, <http://www.herbal-ahp.org>
- * European Scientific Cooperative of Phytotherapy (ESCOP), www.escop.com

(Boddy, 2008; Kiefer et al., 2001).

Appendix H

CAM Communication Strategies Toolkit (continued)

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