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# Integrative Medicine in Primary Care

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Integrative Medicine in Primary Care

by

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### Abstract

Integrative medicine (IM) is an approach to care that puts the patient at the center and addresses the full range of physical, emotional, mental, social, spiritual and environmental influences that affect a person's health (Rakel, 2017). Commonly, integrative medicine is associated with complementary and alternative medicine therapies (CAM). These are two separate entities. CAM is one of the modalities used in integrative medicine.

The review of the literature on IM analyzed studies in primary care settings in all parts of the world. Definitions of IM and CAM are evaluated. Defining what IM is and how to incorporate this approach in an evidence-based manner to primary care is discussed in this project. Patient and provider's perceptions of their experiences are examined.

Study outcomes include positive experiences in IM primary care clinics, reduction in opiate use with CAM and group medical visits (GMV), and resident experiences of incorporating IM into future medical school curriculums.

More studies need to be done, this is a somewhat new area for research, but is an important aspect of primary care as more patients are relying on these CAM therapies than ever before.

Difficulties in methods for evaluating IM in primary care such as the questionnaires are in need of revisions to account for healthy populations.

**Keywords:** Integrative medicine, primary care, complementary therapies, alternative therapies, patient-centered care.

### **Integrative Medicine in Primary Care**

Integrative Medicine (IM) is becoming more important to patients. Research has shown that people find complementary approaches to be more aligned with “their own values, beliefs, and philosophical orientations toward health and life,” (Rakel, 2017).

In the US, visits to alternative practitioners increased to over 600 million by 1997, and a study showed that 4 out of 10 adults had used CAM in the previous 12 months. Reasons that were cited for this increased popularity of alternative therapies included dissatisfaction with conventional health care, which was reported by patients as ineffectual, expensive, or overly focused on curing disease rather than maintaining good health per Flaherty et al. (2015).

Its growth in the past 20 years has proven that patients are relying more on alternative methods of healing and are seeking guidance on these therapies in the primary care setting (Rakel, 2017). Currently, health care reform has changed to a managed care setting, which has been utilized to decrease the costs of healthcare. Managed care involves relying on a primary care physician who acts as a gatekeeper for other services, such as specialized medical care, surgery, and physical therapy (Rakel, 2017). It has also directed medicine toward a team-based care philosophy, integrating all health care professionals to work together for the greater good of the patients and to be more efficient in a time when there are shortages in primary care. In this way, it is thought that team-based care and integrative medicine models have similarities since their goal is to treat the whole person and not the disease (Rakel, 2017). Chronic diseases are at higher rates than ever before per Rakel (2017). Chronic disease patients require more care and often involve more than one organ system. Patients are starting to realize the importance of health and that medicine can only do so much, and that lifestyle modification including mental health is vital to decrease morbidity and mortality (Rakel, 2017).

Outcomes such as patient satisfaction and decreased need for opioids are evaluated to look at how providers are incorporating integrative medicine into primary care.

The major studies cited were Integrating Complementary and Alternative Medicine with Primary Care Health” Shirwaikar, Govindarajan, & Rawat (2013), Integration of Complementary and Alternative Medicine Therapies into Primary-Care Pain Management for Opiate Reduction in a Rural Setting (Mehl-Madrona, Mainguy, & Plummer 2016), and Integrative Medicine: Enhancing Quality in Primary Health Care (Grace & Higgs, 2010). The process for selecting relevant sources included using Clinical Key and DynaMed Plus. The following search terms were included in the search: “Integrative Medicine” [Majr], “Family Practice” [Majr], “Primary Health Care” [Majr], “Patient Care Team” [Mesh], “Complementary Therapies” [Mesh], and “Patient-Centered Care” [Majr]. Articles older than five years were excluded from the research. Articles broad in integrative medicine were included and avoided problem specific outcomes.

Evidence of integrative medicine in primary care and its outcomes are reviewed in this project. Integrative medicine with evidence-based practice aims to treat the patient and not just the disease or condition. To investigate the outcomes that integrative medicine has in primary care, supportive articles and studies are discussed at length, specifically focusing on how integrative medicine therapies (IM), including complementary and alternative medicine (CAM), has been used in primary care and attributed to patient outcomes. The studies that are included also relate to the patient’s perception of integrative medicine and their use in primary care to optimize their health (Rakel, 2017).

**Statement of the Problem**

Many types of therapies are used in primary care for common complaints that patients may have. These therapies include pharmacotherapies and referrals to other specialties. IM and CAM have been around for many years but have recently grown in popularity as patients are looking for alternative therapies for their ailments. There is little research and evidence for these types of therapies being used in conjunction with traditional medicine in primary care settings.

**Research Questions**

What studies have been done to provide evidence-based use of integrative medicine in primary care?

What has research proven for outcomes of integrative medicine in primary care?

How are providers incorporating integrative medicine into primary care using evidence-based methods?

This scholarly project utilized current research to identify evidence-based methods for incorporating Integrative Medicine in primary care. It will also discuss outcomes of IM use in the primary care setting. Evidence based methods of IM will be addressed and how more research is needed in this area.

### **Review of Literature**

A search of peer reviewed journal articles was performed utilizing several electronic databases. These databases included Clinical Key, Ebsco Host, and DynaMed Plus. Several complete articles were retrieved and reviewed including those that describe what Integrative Medicine means, barriers to research in this field, evidence-based practices for integrative medicine (IM), and how to incorporate it into primary care. The following search terms were included: Integrative Complementary Medicine, Integrative and Family Practice, Integrative Primary Care and positive outcomes. Additionally, an Integrative Medicine textbook was used to supplement information on the evidence-based methods of IM. All sources used have been reviewed and published in the last ten years. The articles discussed include interpretive research, surveys, studies, systematic reviews, questionnaires, interviews, and phenomenography method. The participant populations vary from 22 to 308 study participants.

### **Incorporating Integrative Medicine into Primary Care**

One-third of the U.S. population uses CAM therapies, while underserved and multicultural communities utilize them even less. One idea proposed is to incorporate IM into residency programs, which would benefit populations of lower socioeconomic status by giving them more access to these alternative therapies. IM in academic curriculums is also being proposed to establish it in primary care properly. Residents participated in IM group visits and consults and completed the online curriculum in dietary supplements. This study did not follow up with residents to identify those that chose to use IM in their practice (Berz, Barnett, Gardiner, & Saper, 2015).

A holistic model of medicine has gained traction over the past 20 years. Health is multidimensional, and not just the “absence of disease,” (Hunter, Marshall, Corcoran, Leeder, &

Phelps, 2013). Phenomenography was used to ask the participants their understanding of the definition of health. Many positive attributes of health and its influencers were identified. The results affirmed that wellness is more than psychological well-being, happiness, and life satisfaction. Optimum physical and cognitive capacities along with spiritual, social, and occupational wellness were equally important (Hunter et al., 2013).

A perceived benefit to including IM into primary care is to offer an alternative to pharmacological treatments in patients with chronic pain, which is one of the most common reasons individuals seek integrative care. There is evidence that associates higher rates of pain with lower socioeconomic status (SES). This specific population is more likely to develop chronic pain and have more of a severe impact on their lives; they are typically more disabled and distressed from chronic pain, and studies have found expensive interventions are commonly covered by insurance although they lack evidence of cost efficacy. Less expensive IM strategies such as acupuncture and chiropractic treatment, herbal, and behavioral interventions, are not covered by insurance and therefore are rarely available to this group (Rakel, 2017).

A study conducted at a medical school in Ireland on attitudes of medical students toward the practice and teaching of integrative medicine found the overall result was positive, with a high response rate of 65.8%. No previous studies are obtaining the opinion of medical students towards IM. Students were invited to complete the validated IM attitude questionnaire (IMAQ) and state whether they considered it appropriate for them to learn about CAM in medical school. Students and families both desired physicians that were knowledgeable about CAM and could help answer their questions about the different types of therapies. Medical students strongly believed that IM should be taught in medical school (Flaherty, Fitzgibbon, & Cantillon, 2015). It supports the overall theme of this project that IM in primary care is supported by fellow students

and families. The design of this study was carried out using a web-based survey of medical students in five-year groups. An email was sent inviting participants for an anonymous electronic survey exploring their attitudes towards CAM. At the time of this study, no CAM was included in the curriculum of this institution. The age of participants was not included in this study, although the year of study, nationality, gender and previous use of CAM were included. A total of 308 out of 468 students completed this survey. IMAQ scores showed no significant differences based on the student's year of study and nationality. There was a statistically significant difference in the gender difference observed on the "openness" subscale (male median=88, interquartile range 18; female median=92, interquartile range 14.5;  $P < 0.05$ ) but not on the relationship subscale (male median = 43, female median = 42).

An interpretive research study published in 2010 in Australia used hermeneutic phenomenology aimed to understand the contribution IM has on the quality of health care. This strategy was appropriate for the goal of understanding meanings that patients and practitioners attach to their experiences of IM. Cumulative case studies focus, groups, and key informant interviews were used for data collection. For the case studies, three IM clinics were observed for 10 days, and semi structured interviews were conducted with 22 patients, five general practitioners (GP), and six non-conventional medically trained CAM practitioners. The focus groups were created by inviting participants via flyers located at four practitioner seminars and two IM clinics not previously involved in the research. Key informants were selected by purposive sampling based on their reputations as experts; three GP's and three CAM practitioners were recruited. Each participant was interviewed three times for up to 1.5 hours on each occasion. This study was conducted in a clinic that had both IM and GP's in the same location. The results of the study concluded that both practitioners and patients felt that authentic

patient-centered care was provided and that the gaps in the treatment of the complex patient population were filled with IM. Those patients that were seeking treatment with alternative therapies to pharmaceuticals were also satisfied with their care. The patients also felt safe with their care because the IM still retained GP's as the primary care practitioner, and because communication between these providers was effective in managing their conditions (Grace, & Higgs, 2010).

The patients' perspectives of integrative medicine are reviewed by phenomenography and interviews in an article by Hunter & Leeder (2013). It is by these questionnaires on 22 patients and eight practitioners that we will know what type of impact, positive or negative, that IM has in the primary care setting. The outcomes that were measured include lifestyle risk factors, medication use, and health services. This review was the first to use phenomenography as a method to explore the concept of "health that is more than the absence of disease" (Hunter & Leeder, 2013). It lacked individualized patient-centered questionnaires measuring wellness, holistic health, and health promotion/lifestyle activities. A limitation of this study was in the sample of patients and practitioners interviewed. Many interviewees were inspired by the possibility of optimizing health.

Integration of CAM into primary care pain management was studied by Mehl-Madrona et al. (2016). Introducing Group Medical Visits (GMV) provided education about non-pharmacological methods for pain management and taught mindfulness techniques, movement, guided imagery, relaxation training, yoga, qigong, and t'ai chi. Physical activity was required once per week as was two GMV's per month. Doses of opioids were not increased without prior approval from a pain specialist. No participants were forced to decrease their dose of opioids. Forty-two patients attended the GMV's for at least six months out of the 207 participants that

were initially in the program. These 42 participants were matched with patients receiving conventional care. Most patients felt their pain was physical and that only medication could treat this pain. The patients also resented the implication that non-physical factors influenced their pain. The average reduction in opiate use was 0.19 (95% confidence interval [CI] 0.12-0.60;  $p=0.01$ ) for those that stayed in the program for six months or more, and no one increased their opiate dose (Mehl-Madrona et al., 2016). An electronic medical record system was used to help identify matching patients for the GMV group, and although they matched age, sex, gender, and the dose of opiate, there still could have been bias introduced in their selection. Although this study was successful in showing that CAM therapies can help patients reduce their dependency on opiate therapy for pain, it should also be mentioned that 37 participants left before the completion of 6 months; 27 of those that left reported leaving because they failed to maintain their pain contracts and were being tapered off opiates and found other care. It is also noted that internal funding was provided in this study and some of the references used to create this article were greater than ten years old (Mehl-Madrona et al., 2016).

Consumer pressure to use alternative therapies have risen in the past 20 years, and most medical schools in the U.S. are now offering courses in alternative medicine according to an editorial published in the Evidence-based CAM journal by Shirwaikar et al. (2013). It is likely that demand for CAM therapies will continue to rise in the future and that adopting CAM into primary care is adventitious. This considers the desires of individual patients to be treated and that there are alternatives to only using medication to treat a condition or disease. The authors brought up an important concept that standardization of these alternative therapies is also necessary to ensure quality (Shirwaikar et al., 2013).

### **Evidence Based Use of Integrative Medicine**

Veziari, Leach, & Kumar (2017) performed a systematic review searching MEDLINE, Embase, AMED, CINAHL, The Cochrane library, Google Scholar, and Google between February and June of 2016 for relevant publications aimed to explore, identify and map the barriers to the conduct and application of research on CAM. A total of 21 eligible publications were included in this review, eight primary research articles, and thirteen opinion publications. A critical appraisal process found two subcategories of good quality. Two barriers were identified in this process: capacity and culture. Capacity encompassed elements such as access, competency, bias, incentives, and time. Culture relating to the values and complex system of CAM were also identified. The article concludes with stressing that more research needs to be completed on CAM therapies so that they can be further applied to traditional evidence-based medicine. It also brought up that researchers in the CAM community are calling for greater emphasis on evidence-based practices within the CAM profession (Veziari et al., 2017).

Flaherty et al. published a study in 2015 measuring the attitudes of medical students toward the practice and teaching of integrative medicine. The study was carried out using a web-based survey of medical students that was anonymous. The questionnaire distributed was a modified version of the Integrative Medicine Attitude Questionnaire (IMAQ). This a 29-item, 7-point Likert scale-rated instrument. A maximum score of 203 is possible. A two-factor model was used based on the factor analysis which yielded Cronbach alpha coefficient values of 0.91 and 0.72 respectively. Other data such as students age, gender, race, and whether they or a family member had been cared for by CAM therapies were also collected. Results indicated a 65.8% response rate, in which 57.5% were female. Seventy-two percent of the respondents were Irish nationality. There was a non-normal distribution of total IMAQ scores, with the median score of

128. Students with higher IMAQ scores were more likely to express a desire to study CAM in their undergraduate medical curriculum than those with a lower IMAQ score. At the time of this study, there was no CAM included in either the core or elective undergraduate medical curriculum. Medical students strongly believed that IM should be taught in medical school. It supports the overall theme of this project that IM in primary care is supported by fellow students and families. The authors also expressed that patients should be warned about supplements that do not have evidence.

An article by Grace & Higgs (2010) identified weaknesses that little is known about the contribution IM makes to the quality of healthcare because of the limited research that has been done in this area to date. This article is summarized in more detail in the previous section.

The study of CAM therapies in a primary care rural clinic for pain management and opiate reduction was studied in Australia. Evidence from this study showed those that were willing to commit to the GMV's and physical activity over a six or more-month period continued the same dose or decreased their dose of opiates during this period. More detailed information about this study is described in the previous section (Mehl-Madrona et al., 2016).

A review article written by Sarsina and Tassinari (2015) clarifies the terminology used to describe person-centered healthcare and medicine paradigm. It provides a theoretical framework around the concept of integrative medicine. There is a lot of ambiguity in concepts and terminology with this idea, and this article clarified these issues. This article focuses on the definition of Traditional Systems and Complementary and Alternative Medicine (TCAM). It mainly defends the definition that TCAM interacts with western medicine and is not an integration. The article states the importance of the person's rituals and religious beliefs. The authors also ask that providers realize that the patient's outcome may not agree with that of the

provider. Lastly, the authors propose that we educate our patients to empower them to become active members in their health. This study may increase confidence in the validity of previous research by replicating its findings, but it did not add anything new to this area of study. This study posed a research question that wants to clarify the verbiage used to describe person-centered healthcare and medicine. There were no conflicts of interest.

### **Outcomes of Integrative Medicine in Primary Care**

In a systematic review article, Foley and Steel (2017) developed and implemented the *Preferred reporting items for systematic reviews and meta-analysis protocol* (PRISMA-P). The following databases were searched: CINAHL (EBSCOhost), MEDLINE complete, PubMed, Cochrane Library, Proquest Medical Collection, AMED, Alt Health-Watch, Social Sciences Citation Index, PsycInfo and Psychology Collection. A variety of terms were used to cover two main focal points of the review: the patient experience of empathy, empowerment or patient-centered care and the CM clinical setting. MeSH terms and key words on related papers were explored to guide the process of selecting search terms. All study designs constituting original research published between January 2005 and March 2016 were considered. Appraisal with STROBE indicated all quantitative papers were well structured and provided clear, thorough information in the Title, Abstract, Introduction, Methods, Results and Discussion sections. Many of these studies did, however, fail to report on measures to control for bias and neglected to discuss finer details such as missing data. It concluded that it is evident that complementary medicine (CM) consultations provide a patient experience of empathy, empowerment, and patient centered care, but further research is warranted to quantify this experience before it can be defined as a characteristic of CM clinical care. For future practice implications, this review draws attention to the potential role of CM as a resource for patient's psychosocial health needs.

The results of the study on patient perceptions of clinical care in CM were weak quantitatively at best, and that their data was insufficient. Thirty-four studies were included in the review, which is relatively small. The authors searched terms such as empathy, empowerment, and patient centered care which produced much more qualitative data for their study. The article did mention that the use of CM in primary care can enhance the quality of clinical care and that the use of CM in the general population continues to climb over time. No conflicting interests were found with this article (Foley and Steel, 2017).

Integrative health care is a complex emerging field with different meanings and interpretations (Grant and Bensoussan, 2014). Samplings from integrative medicine centers and integrative healthcare leaders in the US were sought. Face to face interviews were conducted for all but one. An interview guideline was developed, and only one person conducted these interviews. Questions focused on gaining a brief understanding of the operational structure of clinics and their processes of care. Specific questions asked were about how patients were managed, who was responsible for the treatment plan, how the treatment plan was constructed. The conclusion to better understand the way in which patients are triaged and treatment plans are constructed through interviews with IM leaders and practitioners was not fully answered. The outcome of the study did contribute to better understanding of integrative health care and provided evidence for future planning, implementation, and evaluation to meet patient needs and demands in this field. It was declared that one of the researchers on this project was also a CAM practitioner and could, therefore, be biased. This researcher also worked in an integrative health care setting (Grant and Bensoussan, 2014). Mehl-Madrona et al. (2016) concluded that GMV that incorporated CAM therapies indeed helped patients reduce opiate use. Although this study was successful in showing that CAM therapies can help patients reduce their dependency on

opiate therapy for pain, it should also be mentioned that 37 participants left before the completion of six months, 27 of those that left reported leaving because they failed to maintain their pain contracts and were being tapered off opiates and found other care. It is also noted that internal funding was provided in this study and some of the references used to create this article were greater than ten years old.

An editorial article published by the Journal Evidence Based Complementary and Alternative Medicine addresses how it is likely that demand for CAM therapies will continue to rise in the future and that adopting CAM into Primary Care is adventitious. This article discusses the desires of certain patients to be treated and that there are alternatives to just medication to treat a condition or disease. The role of CAM should be able to complement the goals of primary health care and that many of the concepts of CAM are consistent with those recommended by already established primary healthcare services (Shirwaikar et al., 2013). It brings attention to an essential concept that standardization of these alternative therapies is also necessary to ensure quality.

Shirwaikar et al. (2013) also recognize that there is not a method validated for integrating CAM with primary healthcare or how to incorporate CAM into conventional medical systems. The authors suggest establishing guidelines for proper integration that uses research and clinical experience. The data needed to make these guidelines is limited, but the Federation of State Medical Boards has adopted new guidelines to initiate this process. This article illuminates the idea that integration is a positive effect on primary health care and emphasizes health promotion and disease prevention.

The literary review on questionnaires for IM in primary care by Hunter, Marshall, Corcoran, Leeder, and Phelps (2013) concluded that most of the IM questionnaires had not been

tested in the primary care setting. The distribution of scores of many popular questionnaires makes them useless due to the inability to differentiate or detect changes and improvement in health and wellbeing in healthier populations as opposed to those of lower socioeconomic status.

The integrative medicine approach is patient centered. It focuses on health promotion and prevention. A branch from this approach to care is the use of complementary and alternative medicine to help treat patients (Rakel, 2017). The goal of this project is to provide support for the use of integrative medicine in the primary care setting, and the outcomes of its use in this setting.

A perceived benefit to including integrative medicine into primary care is to offer an alternative to pharmacological treatments in patients with chronic pain, which is one of the most common reasons individuals seek integrative care. One-third of the U.S. population uses CAM therapies, education about non-pharmacological methods for pain management such as mindfulness techniques, movement, guided imagery, relaxation training, yoga, qigong, and t'ai chi (Shirwaiker et al., 2013). Most medical schools in the U.S. are now offering courses in alternative medicine Shirwaiker et al., 2013. It is likely that demand for CAM therapies will continue to rise in the future and that adopting CAM into primary care is adventitious.

## Discussion

Significant findings from this research project were the outcomes related to the association of IM in primary care. In one study, an opiate reduction was achieved with GMV and use of CAM therapies (Mehl-Madrona et al., 2016).

Residents that were surveyed on their interest of learning IM in medical school reflected positively, stating this would be appreciated as part of the curriculum. (Berz et al., 2015).

A survey was performed on the attitudes of medical students toward the practice and teaching of IM using the IMAQ questionnaire. Overall, 65% of the 308 students expressed a desire to study CAM as part of their medical curriculum (Flaherty et al., 2015).

In Australia, the research concluded that IM enhanced the quality of primary health care through its care that was patient centered, safe, and effective particularly with chronic health conditions, non-pharmaceutical treatments, and health promotion (Grace & Higgs, 2010).

Another review article by Hunter and Leeder (2013) pointed out that the majority of questionnaires have not been tested in the IM primary care setting, and that the distribution of scores of many of them make them difficult to detect changes and improvement in health and wellbeing in healthier populations.

There is not enough research available on how best to incorporate IM into primary care clinics, but many ideas to move in this direction are described. Barriers to this research were capacity and culture. Capacity encompasses access, competency, bias, incentives and time. Cultural elements related to values and the complex system of CAM (Veziari et al., 2017).

**What studies have been done to provide evidence-based integrative medicine in primary care?**

Mehl-Madrona et al. 2016 research on opiate reduction was one of the most robust studies proving the efficacy of IM in primary care. Compared to conventional, current and medical practices of either maintaining dosage or decreasing the dose slowly over time, this use of IM is beneficial to patients to help them reduce their dose of medication to prevent harmful side effects or overdose. The methods used to perform this research study are not necessarily new but is not commonly practiced in primary care. The results of this study may be somewhat skewed due to patients that were not interested in this type of therapy decided to seek treatment elsewhere with a provider that would prescribe opiates for them. This alters the random sampling that this study could have offered, as the participants that remained were open-minded to this type of treatment plan. More research is needed to provide more evidence of its efficacy but does elude to positive outcomes and may be beneficial for certain patients to try these alternative methods for not only decreasing their opiate use but for chronic pain or ailments as well.

Patient perceptions of CAM in primary care provided evidence of empathy, empowerment, and patient-centeredness per Foley & Steel (2016).

Foley & Steel (2016) also did mention that further research needs to be done to quantify the experiences that patients had with CAM in primary care before it can play a potential role of CM resource for patient's psychosocial needs. This is a running theme for all the articles that were researched; there is just not quite enough evidence out there for applicability to primary care setting.

Hunter et al. (2013) findings were inconclusive in finding a questionnaire that would be appropriate for assessing the improvement or changes in the health or wellbeing of healthy

populations in the primary care setting that are using IM. More research is needed to find the best questionnaire for this subject. The idea of a questionnaire to find out how IM is helping or hindering in primary care is a good one, but the right questionnaire has not been developed. This is a tool that will help build the evidence-based use of IM in primary care.

### **What has research proven for outcomes of integrative medicine in primary care?**

The opiate reduction study (Mehl-Madrona et al., 2016) results showed positive outcomes for IM in the primary care setting. The evidence of the study showed no one that continued in the study for six or more months increased their dose of opiates. Seventeen of the 42 reduced their dose, and seven people stopped opiates. In conventional care, no patients reduced their opiate use, and almost half increased their dose over the two years of the project. Although there are again, limited studies of IM, this is a step in the right direction gathering information to support its use.

Foley & Steel (2016) proposed positive outcomes for CM consultations providing an experience that patients felt the provider empathized with them and empowered them.

The questionnaires that were assessed in the article by Hunter et al. (2013) were unable to provide usefulness in the setting of IM in primary care. More research needs to be done on the appropriate survey for this subject.

Multiple barriers exist for the research and application of CAM. As these therapies continue to grow, it will become essential to have evidence to back their use. Addressing the barriers such as capacity, meaning access, competency, bias, incentives, and time CAM professions will be able to integrate evidence-based practice in CAM.

**How are providers incorporating integrative medicine into primary care using evidence-based methods?**

There is a need for more studies to be performed in this area. The lack of evidence was one of the significant struggles with this project. It's becoming an increasingly relevant and requested therapy in the primary care setting.

Shirwaikar et al. (2013) discuss the consumer pressure that is driving the interest and practice of CAM within primary care. The author also states that it must be established how to integrate CAM therapies into the conventional medical system. The first step in proceeding with integration is to establish guidelines for the proper integration, that is supported by the appropriate research and clinical experience. Integrating involves an understanding of CAM, knowing the gaps in the existing system of medicine, and standardizing the chemical properties of drugs to ensure proper quality of the herbal medicines. In the US, the Federation of State Medical Boards has made progress with this step and has introduced a new model of guidelines for the use of complementary and alternative therapies in medical practice Shirwaikar et al. (2013).

Foley & Steel (2016) describes how in the future with more studies that there is a potential for CM as a resource for patient's psychosocial needs. Many patients with chronic conditions have a desire for improved communication, and need for help with self-care, and want to be an active participant in their care. These patients want shared decision making, rendering patient-centered care a useful tool for those with chronic disease (Foley & Steel, 2016).

Hunter et al. (2013) investigated many questionnaires but was unable to conclusively identify a questionnaire that may be beneficial to use in the primary care setting. This would

become an invaluable tool for collecting more data on IM in primary care when a better screening questionnaire is developed.

Hunter et al. (2013) discussed how some interviewees were inspired to optimize their health, and others still believed that preventing and treating disease was the limit to good health. Other studies noted that the people from higher socioeconomic groups were more likely to have positive definitions of health. This is something to be aware of in the primary care setting. The social determinants of health (transportation, education, housing, and income) are vitally important to know to approach the patient and be able to offer the appropriate and needed care.

Grace & Higgs (2010) study determined IM enhanced the quality of primary health care in 3 ways. The health care given was more patient-centered, effective, and safe particularly for chronic health conditions, nonpharmaceutical treatments, and health promotion. By individualizing the treatment plans to the patient and also focusing all health care interactions on the patients, this leads to quality IM in primary care (Grace & Higgs, 2010).

Berz et al. (2015) discussed the matriculation of IM in a preventative medicine program. Students felt more comfortable approaching patients with these therapies and answering questions patients may have about IM after having more knowledge about them. This would be beneficial to primary care, as more and more patients are trying alternative therapies, it will be more commonplace to discuss these with patients in primary care.

Outcomes of IM in primary care settings were more positive than negative. Although there is a lack of evidence, and limited studies were available discussing this topic it is a starting point for more research to be conducted.

An IM clinic that is also attached to a traditional medicine clinic was studied in Australia and found that patients were pleased with their care in this setting (Hunter et al., 2013). There

was open communication between the CAM providers and the traditional medicine providers, and medical records shared the same electronic system which also helped this transition of care between both areas (Hunter et al., 2013).

### **Applicability to Clinical Practice**

In a primary care setting the use of integrative medicine has the potential to be a valuable tool. Many patients are coming to primary care with chronic health care conditions that are multifactorial. Approaching these patients with patient centered care, empathy, and alternative therapies compared to disease-oriented care may be beneficial to patient's wellbeing. Patients that struggle with chronic pain and have tried or are taking multiple pharmacological therapies are not necessarily going to benefit from additional pharmaceuticals. It would be adventitious to have an open dialogue about other options that are available and should be considered for these types of patients.

Herbal medications have gained in popularity in the recent years, and I do believe they offer some value to certain patient populations, but not enough research supports their use alone. At this time, no authority is mandating consistency between these products such as the FDA. It's vital that there is no variation in these products from one supplier to the next.

The study that performed group medical visits as a requirement for patients receiving their opiate medication was more successful than the group of patients that received routine medical visits. Although these patients volunteered for the study and were resistant at first to this type of therapy, few realized that this therapy benefitted them in the long term. In primary care, this therapy has the potential to be very helpful with patients that are opiate dependent.

In primary care, being aware of the many types of alternative therapies that exist and how much evidence supports their use for common ailments seen in this area would be helpful background. Many more patients are beginning to use these CAM therapies, as they are gaining in popularity over the past 20 years. Being able to guide patients as to which therapies have

higher evidence of benefit and also discussing risks versus benefits is an integral part of IM to be comfortable discussing with patients.

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