

Effect of Yoga, A Complementary and Alternative Medicine (CAM) on Anxiety: A Literature Review

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Anxiety disorders are the most common form of psychiatric disorders in the US. They affect up to 40 million adults, or 18% of the population aged 18 and older. Anxiety disorders have a 60% comorbidity rate with depression. Our purpose is to reiterate the effect of yoga on anxiety. A thorough literature research was completed utilizing PubMed, Cochrane, Medline, Elsevier, Psych Info as well as well as some psychiatric textbooks. Over 10 articles were selected with inclusion criteria of the terms anxiety, complementary and alternative medicine (CAM) and yoga. No exclusion data for a target population was included. These articles were then saved on Zotero, a free software available to collect, save, share and cite research articles. While historically, the goal of yoga has been to create a spiritual state of unity, it is also practiced to produce physical and emotional wellbeing. Research suggests that yoga can improve anxiety. Yoga not only limited benefits individuals with mental health disorders, but can also benefit those with physical disorders. The relevance of integrating yoga into the psychiatric nursing practice should be a priority. Due to its undeniable effectiveness in relieving the symptoms of anxiety, yoga must be integrated and promoted into psychiatric practice.

Keywords: *Anxiety, Complementary and Alternative Medicine, Yoga, Wellbeing, Psychiatric Practice*

Overview

Yoga is known to be one of the most commonly used Complementary and Alternative Medicine (CAM) in the United States to help with anxiety. Yoga has been used to reduce symptoms of depression, anxiety, and epilepsy (Streeter et al. 2010). The neurotransmitter, γ -Aminobutyric acid (GABA)-ergic activity is reduced in mood and anxiety disorders. The practice of yoga postures is associated with increased brain GABA levels (Streeter et al. 2010).

The main objective of this literature review is to demonstrate that yoga is effective in the treatment of anxiety. It also looks at how yoga can be beneficial for the healthcare system as a whole.

CAM is often referred to as integrative medicine (IOM-Institute of Medicine 2009). The word integrative, evokes the essence of a holistic approach in the sense of caring for the whole; accounting for both the biological and psychosocial aspects of the person. The quest for mental wellness and recovery from mental and emotional setbacks is fundamental to everyone's path in life. Any search for insight into one's life purpose, any quest for knowledge of the self, must treat mental adversity as an opportunity for growth and for enlightenment. That is the spiritual core of the recovery concept. And it is in that spirit that this outline is offered, for those on the quest of mental health (CAM and Mental Health 2016).

It is important when treating a client psychiatrically to investigate the genetic, temperamental and environmental components of this person. Including

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these components, especially the genetic aspect can provide objective data to the provider or the evaluator. This is why genogram is such an important factor when it comes to psychiatry. Information about a grandparent can provide pertinent information regarding a person behavioral or mental health. Thus, when it comes to a biopsychosocial approach, CAM adheres to those three factors respectively, but emphasizes the psychosocial aspect a great deal without minimizing the importance of the biological factor.

Literature Review

Yoga is reasonably new in the western hemisphere and that not many people understand the practice. In order to provide an in-depth explanation of its philosophical approach, thorough literature research was completed utilizing PubMed, Cochrane, Medline, Elsevier, Psych Info as well as some psychiatric textbooks. It is important to note that the articles chosen for review were high-level articles. Over 10 articles were selected for this literature review project using the keywords "anxiety" and "yoga", since it is the treatment modality selected for the improvement of anxiety disorder for the purpose of this paper. However, an observation made very apparent from the start of the review is that many of these articles did not only mention solely the effective of yoga on anxiety, but also the effect of yoga on other mental health issues, such as depression and mood disorders. Finding the articles that focused on the effect of yoga on anxiety was a tedious task. In order to revisit the article found, Zotero, a software was utilized to revisit and organize the articles selected for review. In addition to Zotero, the Wagner inter-library loan made it possible to retrieve articles without fees. These articles were then saved on Zotero, a free software available to collect, save, share and cite research articles. Some of the articles not all, were very descriptive in reference to yoga and anxiety. Of the articles reviewed, the majority depicted 12-week long studies that examined the efficacy of yoga in regards to anxiety and mood disturbance. One specific article details not only the effect of yoga on mood, but also the effect of yoga on heart rate (Chu et al. 2017). Knowing the relationship of the body and mind it was an expected finding when it comes to the effect of yoga on the cardiovascular system. However, our focus remained true to the effect of yoga on anxiety. Every article was reviewed in relation to yoga and its effectiveness in improving mental health disorder especially anxiety despite the fact that awareness of its full positive effect on the medical aspects has been observed relentlessly on people. On multiple occasions countless stories and documentaries about the effectiveness of yoga on anxiety have been observed and witnessed.

Impact on Individuals and Healthcare Providers

Yoga has been very effective in times of high anxiety, such as preparation for a state board exam or preparing for the fourth year review as an assistant

professor of an institution. It was surprising to see that it was evident that such treatment modality, CAM, has been adapted in the Western hemisphere for over three decades with positive effectiveness. People have been very vocal about embracing yoga as part of their daily life due to the positive results seen in the improvement of their anxiety. During healthcare visit, a client was convinced that, since starting yoga, he is less irritable, less on edge, and more at peace. This client traveled to India and spent a month in a shrine where he learned everything he now knows about yoga. As his healthcare provider, the changes were evident not only psychologically, but physically. Witnessing these phenomenal changes on real life clients helped to confirm the claims made in this article.

Discussion

One of the functions of CAM in America is to allow patients the freedom in directing a portion of the treatment spectrum without prior medical authorization (CAM and Mental Health 2016). Too often complaints are heard from clients that, providers do not really care about their illnesses, and that more focus is placed on the number of clients than on the individual clients' health. Facing these daily complaints personally in the clinical settings and knowing CAM focus when it comes to client-centered care approach, has triggered the interest in delving deeper into CAM. Complementary and Alternative Medicine (CAM) stresses prevention and focuses on the clients' physical, mental and spiritual needs (IOM 2009). A true health provider's goal is to be able to provide improvement in all three of those arenas. As was mentioned before, many of the approaches of CAM have originated from non-Western cultural traditions and are fairly new to the west. The movement toward the use of CAM in the Western health care is relatively new, but clients are becoming receptive to such philosophy by changes in dominant scientific theory and beliefs (Weldon et al. 2011). Patient often adhere to the treatment modalities and are very curious to know more about their effectiveness. The philosophy of these treatment modalities, such as yoga is geared toward complete healing as providers pay close attention to the client as a whole: mind, body and spirit including the lifestyle of clients with their choice of treatment. As a contributing member of the team, the client is more likely to adhere to such approaches. They feel that they have autonomy when it comes to their own health; an interesting finding with CAM is that clients are able to select the modality of care they prefer. This, unfortunately, is an approach lacking in traditional medicine. Clients often have little to no involvement in their treatment plan.

Cultural, Legal and Economic Considerations

Forty percent or more of Americans treat themselves with CAM without professional supervision, often without disclosing it to their psychiatrist or

primary care provider (NCCIH 2011). Therefore it is imperative for providers to inquire about the client's interest or participation in CAM treatment modality. It is notably important to know these facts in order to prevent any risks to the clients' health.

As mentioned earlier, this paper will develop the importance of yoga as one of the several CAM therapies currently available. The United States have embraced CAM so much so that the National Institutes of Health (NIH) created the National Center for Complementary and Alternative Medicine (NCCAM) in 1998 (NCCIH 2011).

In order to incorporate CAM into Western health care practice, providers had to change their way of thinking in respect to clients' beliefs. Contrary to the traditional western healthcare approach, providers had to understand the importance of integrating alternative care into their practices (Van der Riet 2011). To assure that such approach is well known, fundamental change must be systematic. An example of a systematic approach, to revisit the course curriculum of healthcare career students, such nurses, physicians, physician assistants, physical therapist, occupational therapist, pharmacist, medical assistant among others. In the psychiatric field we have witnessed an integration of such treatment modality, however other healthcare fields are alienated of such productive proven approaches. CAM is being adapted for various significant mental health problems, such as depression, substance abuse treatment and neurocognitive disorders (Edwards 2012). Clients have testified of long term improvement by adhering to yoga as one of the CAM treatment modalities. Anxiety disorder is one disorder that CAM has been proven to be an effective treatment modality for. Among the ten most common CAM treatment modalities adapted by adults in the United States (US), yoga is ranked number six (ANA and AHNA 2007). It is not by mistake that the public are waging about the effectiveness of yoga on mental health disorder such as anxiety. Beside yoga, the most frequently used CAM therapies in the US are the following: natural products, such as probiotics found in food as number one, deep breathing as number two, meditation as number three, chiropractic & osteopathic as number four, massage as number five, diet-based therapy as number seven, progression relaxation as number eight, guided imagery as number nine and homeopathic treatment as number ten (ANA and AHNA 2007). It is vital that providers familiarize themselves with the population or community they are serving before suggesting a CAM therapy, because the belief system of these consumers can affect treatment adherence to certain CAM. Belief system and cultural background may be a barrier to getting clients to adhere to yoga.

In places like the Caribbean, yoga is still emerging, whereas natural products such as herbal tea are very common. It is imperative to learn about your population and community before starting to promote yoga. In 2014, a colleague completed a study supporting the claim that yoga has been effective for the treatment of hypertension. She was invited to present such finding to a group of a community of Christian denomination, however the attendance turnout was a failure. The provider did not understand the reasons behind the failed attendance until

locals in the community admitted that they did not consider yoga a Godly thing to do; therefore they did not show up for the presentation due to the belief that yoga is not a divine approach. CAM can be controversial. One could argue that yoga is just physical exercise, how can it conflict with a person's religious values? Questions like this one supports the importance of individual beliefs as well as the CAM approach. In traditional medicine, providers have the tendency to ignore the cultural background of a client and focus on just the person's physical. However, we cannot ignore that the whole being of a person is shaped by her environment, culture and biological aspects. Hence, is what was mentioned earlier in this paper about the importance of a thorough assessment of the bio-psychosocial approach of a person. All healthcare professional would benefit from assessing clients using this approach. In retrospect, this type of assessment will prevent bias and allow us to treat clients effectively and full understanding of their beliefs. Familiarizing ourselves with the population belief system is important in order to offer or provide the most effective and acceptable CAM therapy. As providers, we can make recommendations, however the client must be the decision maker. Providers may intervene, if a clinical treatment modality such as yoga is deemed harmful. Providers using CAM must exercise effective listening skills to prevent dictating clients into doing something that is not their choice or preference. Guidance is the approach in CAM, not dictation. Healthcare providers, more specifically psychiatric mental health providers, must understand that CAM can be effective if used appropriately without pressuring the clients.

Anxiety disorders are the most common form of psychiatric disorders in the US. They affect up to 40 million adults, or 18% of the population aged 18 and older (Kessler et al. 2005). Given the high number of people with this disorder, it is only appropriate that other treatment approaches such yoga are investigated and analyzed. Anxiety disorders are comorbid with depression at a rate of 60% (Sadock et al. 2015). It is such an alarming statistic about anxiety disorders, providers must educate themselves about different alternative treatment modalities, such as yoga to better serve their clients. Yoga is a relaxation technique that helps clients create a balance within the core of the bodily structure in the quest of becoming "in tune" with oneself. It usually includes a number of physical postures, meditation and breathing techniques. While the goal of yoga historically has been to create a spiritual state of unity, it is also practiced to produce physical and emotional wellbeing. Clients have argued the positive impact of yoga on their mental wellbeing. Yoga has become so popular these days, it seems there is a yoga studio popping up on every corner. This increased interest in yoga is due to the positive outcomes that clients have been describing. Not only does yoga improve mental stability, but it improves physical stability as well. Research suggests that yoga can improve anxiety (Khalsa and Cope 2006). Such confirmation is not secret to the public nor is a secret to the healthcare system.

Studies have shown that yoga can have positive benefits for people with several types of mental health conditions, including depression, attention deficit hyperactive disorder, anxiety, schizophrenia and Post-traumatic stress disorder

(CAM and Mental Health 2016). As mentioned early on in this paper, we are aware that yoga is very effective, however, for the purpose of this paper, we will focus solely on its effect on anxiety. When people in treatment acquire treatment modality, like yoga for reducing anxiety, they are better able to tolerate the painful memories and emotions that arise during therapy sessions as well as in their outside daily life (CAM and Mental Health 2016). Integrating such a treatment modality within one's practice should be encouraged especially for clients suffering from anxiety disorders. Public awareness must be completed in promotion of yoga and its outcomes. Education of faculty in the healthcare field is also warranted for the promotion of CAM inclusion as a treatment modality approach. Yoga has been shown to be effective in alleviating symptoms of anxiety in healthy volunteers and psychiatric populations (Bilderbeck et al. 2013). This proof is instrumental to both populations: clients with and without any mental health disorders. Yoga has been shown to be effective as primary, secondary and even tertiary approach when it comes to treating anxiety. This information is instrumental in understanding the depth of positive impact yoga can have on clients. Another important factor that consumers have concerning yoga is cost. Often clients or consumers ask the following questions: why should I try yoga? what are the costs? These are legitimate questions that require accurate answers and explanations. The evidence in effectiveness of yoga as an alternative treatment for anxiety can help alleviate healthcare cost both for the clients and the healthcare system as a whole. How can such claim be confirmed? The review of the articles indicates that people with anxiety disorders frequently seek health care services for relief of physical symptoms, at a cost of approximately \$22 billion per year (Kessler et al. 2005). Information on the saving of expenditures of healthcare costs should be made more widely available to the healthcare system in order to promote the use of yoga more frequently in the healthcare field, more specifically in mental health. Yoga has received considerable attention for its therapeutic benefits over the past few decades (West et al. 2004). It is understandable why yoga would be popular in the mental health: including yoga in the treatment plan can help reduce the healthcare cost, which is a win-win situation for both parties the clients and the healthcare institution. For example, as a member of a yoga course the membership course rate ranges \$100 to \$150 and clients are at liberty to stop at anytime if they feel that the techniques are not effective, which in turn will help them save and control their financial funds. This is why clients feel that they are in control of their own health and financial stabilities. Clients who choose to continue even after improvement of their anxiety disorder are encouraged to adhere to such routine, as long as it is their choice to continue the treatment modality. It is important for the provider to be aware of the yoga instructor's credibility. With technology enabling easy proliferation of information, there are increased opportunities for scams. Anyone can claim that they are a certified yoga instructor, therefore it is imperative to have referral process in place. Providers must be vigilant about where they are referring their clients. Additionally, since the relationship is a team approach, providers should subject responsibilities in choosing a credible and reliable yoga

instructor. If the psychiatric nursing provider is not certified in the practice of yoga, it is important to refer the client to a known, reliable and respectable certified yoga instructor. It is important to do so because although yoga is a relaxation technique, there are some contraindications associated with it. Therefore, providers must be aware of the client's wellbeing and clinical status before referring clients to this type of CAM therapy. Because rapid yoga breathing can lower serum lithium levels, people being treated with lithium alone should not attempt it (CAM and Mental Health 2016). The population that will most likely be treated with Lithium would be clients with bipolar disorder, therefore thorough medical history data and physical exam are warranted to be part of the clients' health clearance prior to starting yoga, especially rapid yoga breathing. The public is not aware of this pertinent information; because when sharing this information with consumers, very seldom the feedback is that they were aware of these facts. Therefore continuous education should be part of the treatment sessions of the yoga modality. It is our responsibility as providers to have policies or guidelines in place for clients inquiring about yoga treatment as well as other providers to follow and adhere to. Client education regarding yoga should be thoroughly provided to clients if the treatment will be initiated by the provider in combination with his/her conventional treatment plan. Approach of treatment however, is different when the clients started their quest with yoga on their own. Concerns regarding credibility is not the responsibility of the providers, however it is part of treatment plan to educate our clients about the pros and cons of their treatment approach of choice. It is undeniable, however if the client is under the care of a mental health provider, it is the responsibility of the provider to collect pertinent subjective data from the client to assure that the client is safe to continue such treatment. Clients must be made aware and understand both the efficacy and contraindications yoga. Pregnancy, uncontrolled hypertension, a recent heart attack or serious heart disease, seizure disorders, migraine headaches, chronic obstructive pulmonary disorder (COPD), asthma, and physical injuries are all contraindications for rapid or forceful yoga breathing. People in this population should be recommended to adhere to slow, gentle yoga breathing practices as they have been proven to be both safe and effective (CAM and Mental Health 2016).

Findings

The evidence is clear and precise that yoga is one of the CAM therapies most explored by clients in the US (CAM and Mental Health 2016). However, the mechanism of action on how yoga is effective is not totally understood. The reason behind the effect of yoga on anxiety, is not clear for us and may be transient (Shohani et al. 2018). Integrating yoga into the care plan of clients with anxiety proves to be effective when used in combination with conventional therapy. Pharmacologic agents that increase the activity of the GABA system are prescribed to improve mood and decrease anxiety (Streeter et al. 2010).

Therefore, clients need to adhere to the appropriate treatment plan formulated by their psychiatric provider. Its relevance into the psychiatric nursing practice is of priority and it will be integrated and promoted into future practice as a psychiatric nurse practitioner.

Even with the evidence so clearly supporting the efficacy of the effect of yoga on anxiety, there are clients who are still ambivalent about starting treatment. This behavior is expected to face because some people will always be skeptical of anything new to them. Not everyone will take initiative and try a treatment modality despite the facts that such treatment has been proven to be largely effective. The strength of this study has been proven within the findings that yoga, whether it be rapid breathing or basic, is indeed effective in improving anxiety. However, as mentioned earlier, the inability to promote rapid or forceful yoga breathing on certain populations with pre-morbidity issue such as pregnancy, uncontrolled hypertension, seizure disorders place a limitation in finding if that type of yoga would be beneficial for the specific populations.

Framework

A technique used in the past proven to assist clients in need of help with mental health disorders was the motivational interview known as MI in the psychiatric field. Miller and Rollnick (2013) described the Motivational Interview (MI) as a technique in which the psychiatrist or psychologist becomes a helper in the change process and expresses acceptance of the client. It is possible for some patients to change on their own, however for others, it requires continued support throughout their journey to recovery. In studies conducted in the past, the used of MI for clients using antipsychotics who wanted to lose weight resulted from lack of exercise was adopted to identify readiness period from clients willing to make a change in their behavior. It is very important to address principles to identify the phase that the client is at. Miller and Rollnick described these principles as the following: express empathy through reflective listening, develop discrepancy between clients' goals or values and their current behavior, avoid argument and direct confrontation, adjust to client resistance rather than opposing it directly and support self-efficacy and optimism. Once these principles are established with the clients, readiness to change should be assessed in order to create reachable goals individually made for the client. Clients in the aforementioned study were all ready to lose weight and wanted to participate in a twelve-week program. Light exercise movements along with the elimination of soda consumption and education on a healthy diet were part of their program. Continuous support and encouragement were provided to the participants when needed. Mental health providers are encouraged to apply such techniques when helping clients who are willing to try yoga to improve their anxiety. After reading one of the best books in psychiatry, written by Sadock et al. (2015) it has come to the realization that motivational interviewing (MI) can be a great tool used to fight anxiety. The mentioned authors define MI as a technique used to motivate the patient to change his or her

maladaptive behavior. As Tusaie and Fitzpatrick (2013) mentioned, the overriding goals of treatment are to decrease intensity and number of symptoms, modify risk factors, and increase protective factors. It is almost certain that the process will not always be an easy process, therefore clients must be made aware of such possibilities. However, if providers display an empathetic approach in order to understand the patients' problem, then that is the first step of the process. Support must then be provided while making note of the client's strengths. Once strengths are noted, then it is very important to explore the ambivalence and conflicting thoughts of the patient regarding the specific change.

Engaging the clients to actively participate in discussion about how yoga will be impacting during the interview is important. Encouraging clients to participate in MI during psychotherapy has proven to be effective (Sadock et al. 2015). Therefore it is essential that MI be implemented in mental health practices and that participation in psychotherapy be mandated for clients with anxiety.

Substance Abuse and Mental Health Services Administration (SAMHSA) is on a campaign to bring awareness to the risk and protective factors that contribute to a patient's mental health and or substance abuse disorders. They developed what is called the Strategic Prevention Framework (SPF). It is a comprehensive guide that helps providers to plan, implement, and evaluate prevention problems. The SPF includes five steps: Step one is to assess the needs (what is the problem and how can I learn more), step two is to build capacity (what do I have to work with), step three involves planning (What should I do and how should I do it), step four includes implementation (How can I put my plan into action) and finally step five which includes evaluation (Is my plan succeeding).

Resilience is one of the strategic approaches that mental health providers should adapt for clients at risk for mental health disorders such as anxiety, when using SPF. For example a female client currently dealing with a history of anxiety who has recently been divorced is at risk for anxiety exacerbation. This particular client would require a sense of resilience to overcome her unfortunate situation. Davidov et al. (2010), indicates that resilience can be viewed as a defense mechanism, which enables people to thrive in the face of adversity and improving resilience may be an important target for treatment and prophylaxis. Knowing the unavoidable risk factors can help mental health providers assess their clients to see if they acquire such defense mechanism. Identifying the level of resilience each client has can be difficult. Although environmental factors play a strong role into an individual's level of resilience, Davidov et al. (2010), proved that gene–environment combinations may determine both risk and resilience in a patient. Mono-causal belief is actually losing sight of multi-causal approaches in mental health, because as providers we should see our patient as a system, which include biomedical, psychology and socio-cultural in order formulate the proper diagnosis for a specific client. We should also individualize client care approaches due to the differences of each client's resilience level. Identifying the level of our clients' resilience can provide us a sense of directing our clients to treatment modalities such as yoga that can improve the symptoms of their anxiety.

Anxiety can be debilitating to the point of clients refusing to go out to the public, due to their malaise and uneasy feelings felt experienced with agoraphobia. The constant worry that someone is possibly judging them is a complaint that many clients have verbalized during psychiatric evaluation. It is very common to have two people who have experienced the same somatic disorders, such as trauma and stress, and react totally different from each other. One can become very successful in life, even thrive in society, while the other person, who faces the same adversity, becomes institutionalized in a mental health facility. Although it is difficult to clearly depict why two individuals experiencing the same hardship can have distinctly different outcomes, we, as providers, often think it is based on the level of resilience each of them obtain.

Screening and Education

Screening the population at risk for certain mental health disorders such as anxiety clients is important in order to prevent delayed referral for yoga treatment. Inquiring about previous treatment modalities beside traditional medicine should be completed in addition to acquiring family past mental health history to investigate any signs of resilience. Once screening is completed, clients should be educated about the effect of yoga on anxiety. Mental Health providers will provide the clients' access to the community resources information so that they can seek help if needed. CAM is known as an approach that allows clients to be engaged in their own care plan. The yoga instructor will then determine the type of yoga the clients should follow based on their medical or psychiatric history.

Conclusion

Normal anxiety is a healthy response to stress that is essential for survival. Persistent anxiety, however, can result in anxiety disorders. Anxiety disorders tend to be persistent and are often disabling. Yoga needs to be part of the treatment guidelines of all psychiatric providers, because it has proven through the literature review, to be very effective in clients with anxiety as well as in the saving cost of the healthcare system.

It is crucial that early intervention is offered to clients dealing with those illnesses to prevent further comorbidity problem such as depression. Therefore to prevent this problem, providers can follow these simple steps: early detection of anxiety, readiness for change based on the MI, identify resiliency and encourage clients to participate in yoga, because the evidence is clear that yoga is effective in clients with anxiety. Clients must be encouraged to adhere to their pharmacological treatment in conjunction with their yoga practice. It is suggested that further studies are completed to investigate the mechanism of action of yoga on anxiety.

References

- ANA-American Nurses Association and AHNA-American Holistic Nurses Association (2007) *Holistic nursing: Scope and standards of practice*, 2nd ed. Silver Spring, Md.: American Nurses Association.
- Bilderbeck AC, Farias M, Brazil IA, Jakobowitz S, Wikholm C (2013) Participation in a 10-week course of yoga improves behavioral control and decreases psychological distress in a prison population. *Journal of psychiatric research* 47(10): 1438-1445.
- CAM-Complementary & Alternative Medicine and Mental Health (2016) *A comparative evidence-based approach to complementary and alternative treatment for mental health conditions*. Retrieved from: <https://bit.ly/2LTevXQ>.
- Chu IH, Wu WL, Lin IM, Chang YK, Lin YJ, Yang PC (2017) Effects of yoga on heart rate variability and depressive symptoms in women: A randomized controlled trial. *The Journal of Alternative and Complementary Medicine* 23(4): 310-316.
- Davidov DM, Stewart R, Ritchie K, Chaudieu I (2010) Resilience and mental health. *Clinical Psychology Review* 30(5): 479-495.
- Edwards E (2012) The role of complementary, alternative, and integrative medicine in personalized health care. *Neuropsychopharmacology* 37(1): 293-295.
- IOM-Institute of Medicine (2009) *February summit on integrative medicine and the health of the public*. Retrieved from <https://ces.to/uhjjiY>.
- Kessler RC, Chiu WT, Demler O, Walters EE (2005) Prevalence, severity, and comorbidity of twelve-month DSM-IV disorders in the National Comorbidity Survey Replication (NCS-R). *Archives of General Psychiatry* 62(6): 617-627.
- Khalsa SBS, Cope S (2006) Effects of a yoga lifestyle intervention on performance-related characteristics of musicians: A preliminary study. *Medical Science Monitor* 12(8): 325-331.
- Miller WR, Rollnick SR (2013) *Motivational interviewing: Preparing people for change*, 3rd ed. New York, NY: The Guildford Press.
- NCCIH-National Center for Complementary and Integrative Health (2011). *Complementary, Alternative, or Integrative Health: What's In a Name?* Retrieved from <http://nccam.nih.gov/health/whatiscom>.
- Sadock B, Sadock V, Ruiz P (2015) *Kaplan and Sadock's synopsis of psychiatry: Behavioral sciences/clinical psychiatry*. Philadelphia, PA: Lippincott, Williams & Wilkins.
- Shohani M, Badfar G, Nasikandy MP, Kaikhavani S, Rahmati S, Modmeli Y, et al. (2018) Effect of Yoga on Stress, Anxiety, and Depression in Women. *International Journal of Preventive Medicine* 9(21).
- Streeter CC, Whitfield LO, Rein T, Karri SK, Yakhkind A, Perlmutter R, et al. (2010) Effects of Yoga Versus Walking on Mood, Anxiety, and Brain GABA Levels: A Randomized Controlled MRS Study. *The Journal of Alternative and Complementary Medicine* 16(11): 1145-1152.
- Tusaie KR, Fitzpatrick JJ (2013) *Advanced Practice Psychiatric Nursing*. New York, NY: Springer Publishing Company.
- Van der Riet P (2011) Complementary therapies in health care. *Nursing & health sciences* 13(1): 4-8.
- Weldon S, Polglase K, Andrews Hb, Carrington P, Baker AH (2011) Evaluation of meridian based intervention: Emotional freedom technique (EFT) for reducing specific phobias for small animals. *Journal of Clinical Psychology* 59, 943-966.
- West J, Otte C, Geher K, Johnson J, Mohr DC (2004) Effects of Hatha yoga and African dance on perceived stress, affect, and salivary cortisol. *Annals Behavioral Medicine* 28(2): 114-118.

