COMPLEMENTARY AND ALTERNATIVE MEDICINE USE AMONG PEOPLE LIVING WITH HIV OR AIDS

EL USO DE MEDICINA COMPLEMENTARIA Y ALTERNATIVA EN PERSONAS VIVIENDO CON VIH O SIDA

Reiley Reed*

BA Psychology

Research Assistant Escuela de Enfermería Pontificia Universidad Católica de Chile

Lilian Ferrer Lagunas

PhD Public Health

Associate Professor Escuela de Enfermería Pontificia Universidad Católica de Chile

Artículo recibido el 8 de marzo de 2012. Aceptado en versión corregida 19 de abril 2012

RESUMEN

VIH y SIDA es una preocupación permanente en todo el mundo, a pesar de ello, solo 3 millones de personas tuvieron acceso al tratamiento antirretroviral durante el año 2007 y se estima que solo 11.6 millones de personas tendrán acceso este en el año 2015. El propósito de esta revisión de literatura es identificar el uso de medicinas y terapias complementarias y alternativas (CAM) que utilizan las personas que viven con VIH o SIDA. Esto permitirá evaluar la factibilidad de sugerir la incorporación de estas terapias en los planes de tratamiento. La búsqueda se realizó entre el 1 de junio y 3 de junio de 2011, utilizando como criterio de selección ser un artículo de los últimos 5 años. Esta revisión permitió identificar que CAM se usa hoy manejar y tratar varios problemas relacionados a vivir con VIH, tanto a nivel biológico, social y psicológico, logrando buenos resultados de acuerdo a la percepción de quienes lo utilizan. Es relevante considerar que CAM potencialmente podría servir como método de potenciar un tratamiento más integral y centrado en el paciente, para quienes estas terapias parecen ser formas de manejar los aspectos incontrolables de vivir con VIH. Palabras Clave: Terapias Complementarias, VIH, SIDA

ABSTRACT

HIV and AIDS is cause for concern all over the globe, however only 3 million people were reported to have access to antiretroviral treatment in 2007, and only 11.6 million are projected to have access in 2015. The purpose of this article is to review the existing literature on the use of complementary/alternative medicines and therapies (CAM) among people living with HIV or AIDS in order to suggest its incorporation into mainstream treatment plans. CAM is used to treat many aspects of living with HIV, whether biological, social or psychological. Searches were conducted including articles written in the past five years between June 1, 2011 and June 3, 2011. CAM is often chosen as a way to manage issues that antiretroviral medications do not control, for example the emotional aspects of living with HIV. CAM can potentially serve as a method of giving people living with HIV more integral, patient-centered treatment. **Key words:** Complementary Therapy, HIV, AIDS

^{*} Correspondencia e-mail: rreeda@uc.cl

INTRODUCTION

HIV and AIDS is cause for major concern all over the globe. By the end of 2008, there were 33.4 million reported cases of people living with HIV (PLWHIV) worldwide, with 2.7 million new infections and 2 million HIV related deaths(1). Though universal access to HIV treatment has been called a global priority, only 3 million people were reported to have access to antiretroviral treatment in 2007, and only 11.6 million are projected to have access in 2015⁽²⁾. This situation is demonstration of the urgent call for cheaper and more efficient HIV treatments, as in 2007 antiretroviral treatments were accessible to only 9% of PLWHIV worldwide⁽²⁾.

Research indicates that use of complementary or alternative medicine (CAM) among people living with HIV or AIDS is extensive^(3,4). There is a wide range of types of complementary/alternative medicines and therapies (CAM) that are used to treat many aspects of living with HIV, whether biological, social or psychological. For example, in a study which examined CAM use among gay and bisexual Latino men living the United States, meditation, yoga, massage, energy work, acupuncture and tai chi accounted for 72.4% of the participants' CAM use⁽⁵⁾. Many people use complementary or alternative medicines and therapies to control uncomfortable side effects caused by antiretroviral medication itself, HIV/AIDS related symptoms, or to manage aspects of living with HIV that conventional treatments do not address⁽⁶⁾. For example, Williams et al.(7) demonstrated that a month long program of combined meditation and massage versus meditation programs, massage programs, and standard care, yielded the most improvement of overall quality of life among late stage AIDS participants (as measure by the Missoula-Vitas QOL index)⁽⁷⁾.

The primary objective of this literature review is to synthesize the existing literature on CAM use among PLWHIV in order

to better understand: Motivations for using CAM, Effects of CAM use on quality of life and adherence to conventional treatments, the effects of CAM use on quality of life, adherence to conventional treatments, and CAM and it's relation with biological markers of HIV. Through the summarization of the existing literature, it will become clear what research is needed to fill in the gaps to gain a deeper understanding of CAM use in PLWHIV, in order to draw some conclusions as to what role CAM may serve in HIV treatment plans for PLWHIV.

METHODS

Searches were conducted in Science Direct, OVID, Cinhal, Psychlnfo, and PubMed between June 1, 2011 and June 3, 2011. Only articles written in the past five years were included in the review. The first 100 articles found in each database using the key words were reviewed based on the title of the article and then were further reviewed based on the following inclusion criteria: articles in English or Spanish related to patients' motivations for using CAM among PLWHIV, and how it affects adherence, quality of life, or biological markers. The operational definition of CAM utilized in this review is a supplementary or alternate treatment used specifically to treat symptoms or conditions related to HIV, used either in conjunction with or as an alternative to conventional antiretroviral medication. Twenty-one articles met these criteria and were included in the final review.

RESULTS

Motivation for using CAM

The term complementary and alternative medicine encompasses a vast number of treatments and therapies. The commonly used complementary therapies across studies were dietary supplements and spiritual therapies⁽⁸⁻¹²⁾. In a descriptive study which examined CAM use among PLWHIV, 71% of the CAM using

participants reported using dietary therapies such as dietary supplements, herbs, or megavitamins, and 66% of the participants reported using some kind of spiritual therapy, such as meditation, faith-healing, or visualization⁽⁹⁾. However, in a study which examined the use of complementary practitioner, the most common CAM practitioners reported among male participants were acupuncturists (64%), chiropractors (59%) and homeopaths (34%)⁽¹³⁾.

One of the most commonly reported motivations for using CAM is to treat side effects related to conventional antiretroviral treatments^(8-10, 14-16). However, PLWHIV also have been reported to use CAM to maintain general wellbeing. For example in a Chinese study in which 76 HIV positive men were interviewed, the participants who generally consumed Traditional Chinese medicine did so to maintain general health, while those who used Traditional Chinese medicine irregularly did so specifically to treat symptoms related to HAART treatment⁽¹⁵⁾.

Finally, many PLWHIV report using CAM because they become frustrated with antiretroviral medications and feel that they only target the biological aspects of living with HIV and cause uncomfortable side effects in addition to leaving the psychological and social aspects of the disease untreated^(12,17). People choose CAM as a way to manage issues that antiretroviral medications are not able to control, for example the emotional aspects of living with HIV^(12,18). Additionally, the process of choosing an additional treatment in itself may be therapeutic as it allows patients to have a sense of control over their treatment⁽¹²⁾.

Communication between PLWHIV and Health Professionals

It has been found that patients would like to talk more openly to their physicians about CAM use, and that many PLWHIV who use CAM believe that their relationship with health professionals would greatly improve if there was more

opportunity for communication and openness about CAM use(12,17). Accordingly, reports of patient disclosure of CAM among PLWHIV are low, despite high reports of CAM use and confirmedly dangerous interactions between certain types of CAM and antiretroviral therapies(11, 19). In a study which was executed in Western Uganda, 137 HIV positive participants receiving antiretroviral therapy, were interviewed or participated in focus groups regarding CAM use and disclosure to conventional practitioners⁽¹¹⁾. Only 10.2% of these participants reported informing their conventional medicine practitioners of their CAM use, although 64% of them report using herbal CAM. Participants reported that their conventional medicine practitioners did not ask them if they were using any other treatments, participants reported feeling fear that conventional practitioners would react negatively and unsupportively towards continuing the use of CAM. Not surprisingly, only 67.6% of participants stated that they would inform conventional practitioners of their CAM use even if they were asked directly(11). Moreover, CAM users have also reported feeling that alternative care practitioners are more sensitive. patient and generally better at explaining illness and treatment(13).

This situation is cause for concern as mainstream health practitioners have been found to play an extremely important role in supporting patients' adherence to antiretroviral medication, as adherence is affected by patient-practitioner relationships and communication⁽²⁰⁾. In a study conducted among women living with HIV, open communication within practitioner-patient was found to be imperative for disclosure of CAM use to health practitioners⁽¹⁹⁾. Furthermore, disclosure of CAM use to physicians was found to be significantly associated with better adherence to HAART. Finally, it was also found that participants were more likely to disclose spiritual and faith health CAM methods than herbal remedies to their conventional practitioners⁽²¹⁾.

In this same study non-adherence to ARV was demonstrated to be associated with the use of herbal CAM, further indicating that the those patients who use herbal CAM tend to more strongly resist use of conventional medicine practices for HIV.

Effects of CAM use on quality of life and adherence to conventional treatments

As previously mentioned, many people use CAM to treat aspects of living with HIV that conventional treatment cannot (12). Some of the most commonly mentioned aspects of living with HIV that people tend to treat with CAM is quality of life, control of antiretroviral side effects, and general health maintenance(12,15,17). Exercise is another important type of complementary therapy found successful among PLWHIV. A study conducted among older HIV positive men receiving ARV therapy, demonstrated that non-AIDS-related co-morbidity predicts cardio respiratory fitness⁽²²⁾. Patients with serious hypertension were found to have on average 0.25 L/min lower than those with controlled, moderate, or no hypertension. This implies that exercise as a form of complementary therapy is not only important for controlling symptoms related to antiretroviral treatments, but also as a way of managing coexisting illnesses that can greatly affect the health and quality of life among older adults living with HIV or AIDS.

In various studies, relaxation and psychosocial therapies have been found to improve quality of life. For example, the effect of adding instructions eliciting a relaxation response in addition to listening to relaxing music during a typical acupuncture treatment for HIV patients was demonstrated to provoke reported more positive emotional, physical and spiritual changes, as well as more relaxation than those participants in the control group who only listened to soft music during the same acupuncture treatment⁽²³⁾. While acupuncture has the potential to create positive effects in the context of a complementary

therapy, further research should be conducted as to what additional elements, such as relaxation response tapes, could to do to maximize the treatment for HIV positive patients⁽²³⁾.

Similarly, it was demonstrated that spiritual mantrams can be successful in reducing HIV intrusive thoughts, trait-anger, and stress⁽²⁴⁾. Additionally, according to the Quality of life enjoyment and satisfaction scale (Q-LES-Q), the intervention (mantram) group's quality of life improved significantly as compared to the control group. This suggests that actual mantram repetitions, not only HIV management classes, may have unique contributions for managing psychological distress and control in HIV positive adults.

CAM and its Relation with Biological Markers

In addition to quality of life and adherence to medication, CAM has also been demonstrated to yield physical outcomes among PLWHIV, depending on the type of complementary treatment used. Potential change in CD4 count depends on what type of CAM the patient uses and the patient profile. One study found that the average difference between CD4 counts of CAM users vs. non-users was found insignificant (430 for CAM users and 400 for non CAM user)(10). However, studies on other types of CAM demonstrate the contrary. For example, the use of 500 mg of Neem leaf extract in two daily supplements was found to yield a significant increase in CD4 count among PLWHIV(25). Participants' CD4 count increased an 159%, which is an average increase of 266 CD4 cells. Furthermore, incidence of other HIV/AIDS related pathologies such as fever, weight loss, generalized lymphadenopathy and diarrhea declined significantly. This decline in HIV related conditions can be attributed to the increase in immunity function⁽²⁵⁾.

Another study which was successful in raising participants' CD4 counts was a

study which measured the biological effects of meditation on 48 participants living with HIV⁽²⁶⁾. The efficacy of an 8-week Mindfulness-based stress reduction meditation (MBSR) program compared to a one day control conference on CD4+ T lymphocytes, for HIV positive adults who reported themselves as stressed, was studied. It was found that compared to the control group, the meditation intervention did have an effect on CD4 count. Participants in the one day control showed an average decrease of 185 in CD4 count from baseline to post-intervention, while the CD4 count of participants in the MBSR group slightly increased, an average of 20, between baseline and post intervention.

Similarly, the biological effects of alternative stress management interventions (cognitive behavioral relaxation training, focused tai chi, and spiritual growth) have been examined among PLWHIV(27-28). In comparison to the control group, the relaxation training and tai chi groups both used less emotion focused coping and increased lymphocyte proliferative function, which implies that during the intervention, the participants were able to produce more new healthy lymphocytes than those in the control group⁽²⁷⁾. Correspondingly the biological effects of spiritual mantrams among PLWHIV and the faith/assurance mantram intervention, which taught participants to create positive mantrams and how to use them, that there was a significant inverse relationship between participants' levels of faith at pre-intervention and their cortisol levels at post-intervention⁽²⁸⁾. Likewise, there was a significant inverse relationship between faith levels at post-intervention and cortisol levels at the 5-week follow-up. There was no significant relationship found for the control group. These results imply that there may be unique factors in mantram repetition which allow HIV positive individuals to decrease their stress level to the point that they change secrete less cortisol, a hormone related to stress.

DISCUSSION

An important conclusion to be drawn from the synthesis of the literature included in this review is that the definition of complementary and alternative medicine is constantly changing and varies from study to study. This may affect how seriously CAM is taken by health professionals. However, it is important to recognize that many of the complementary and alternative therapies have been demonstrated to lead to various positive outcomes depending on the context of their use. CAM has the potential to affect people's sense of personal autonomy, control over treatment, general quality of life, adherence to conventional treatments, and CD4 count, among other biological markers. It is therefore imperative that PLWHIV discuss CAM use with their doctors as CAM has the potential to interact with conventional treatment(19).

An interesting area of research which lacks investigation is health professionals' opinions of CAM use for PLWHIV, as the research that does exist on patients' perspectives of conventional practitioners' attitudes towards CAM indicate that many patients perceive that conventional medicine practitioners hold negative attitudes towards CAM use(11-12,17). Literature on topic from before 1998 was not found. though it is a worthwhile area to explore as the opinions of health professionals could serve patients as a guide for selection of treatments for different HIV related issues. Additionally, perceived negative attitudes towards alternative treatments have been reported as one of the main causes that patients do not discuss their CAM use with their doctors(11-12). Health workers therefore have the responsibility of being educated and informed about the potential educating effects and interactions that CAM may have on a PLWHIV who takes conventional treatments.

More information about how different types of CAM function for differ-

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ent patients may serve to eliminate the prejudices that exist between CAM and conventional treatments. The removal of these prejudices may allow patients to feel more comfortable disclosing CAM use to their conventional practitioner. The fact that many PLWHIV use complementary treatment specifically to treat symptoms related to conventional antiretroviral medicine serves as support that health professionals could use complementary treatments as an extra resource to help treat PLWHIV^(10,15,23).

Complementary treatment has the potential to serve as a method to give PLWHIVIV more integral, patient-centered treatment plans. In this way, health professionals would be able to give their patients more individualized treatment according to each patient's unique needs. Low cost complementary or alternative treatment interventions could be extremely cost efficient for a hospital or clinic to implement. For example, hospitals could provide voga, meditation or stress management classes to PLWHIV on a sliding pay scale in order to boost senses of personal autonomy control, as well as a network of social support, which has been demonstrated to affect not only quality of life but biological markers as well^(25, 28).

Another option for low-cost complementary treatments could be prescribing patients herbal remedies or nutritional supplements, which have demonstrated to have effects on both quality of life and CD4 count^(6, 25). If patients had higher CD4 counts and rates of adherence to conventional medicines as result of complementary treatments, hospitals would then be able to cut down on other costs of more expensive conventional interventions, as well as increase the quality of life of their patients living with HIV. In conclusion, CAM is commonly used among PLWHIV, however it remains to be a widely untapped resource among conventional health practitioners that has the potential to benefit PLWHIV in various ways. More research is needed on the subject to determine exactly how and which CAM options can be incorporated into more medical centers and hospitals.

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