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A Binational Comparison of HIV Provider Attitudes Towards the Use of Complementary and Alternative Medicine among HIV-Positive Latino Patients Receiving Care in the US-Mexico Border Region

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Abstract

Use of complementary and alternative medicine (CAM) is common among Latinos living with HIV in the United States (U.S.)-Mexico border region. Health providers may vary in their approach to communicating acceptance or non acceptance of CAM use, which can undermine patient confidence in disclosing CAM use. Patient-provider communication about CAM is important because certain types of CAM can affect antiretroviral therapy (ART) adherence. We undertook the present binational study to understand U.S. and Mexican provider beliefs, and perceptions surrounding CAM use among Latino patients, and to learn if and how CAM communication occurs. Between July and December 2010, we conducted in-depth, qualitative interviews in Tijuana and San Diego. Analysis procedures drew upon principles of Grounded Theory. The sample was comprised of 19 HIV-health care providers, including 7 women and 12 men. Emerging CAM-related themes were: Provider's perceptions, attitudes and knowledge about CAM; CAM types and modalities; and patient-provider CAM communication. Many clinicians were uncomfortable supporting CAM use with their patients. San Diego providers reported more frequent instances of CAM use among Latino patients than Tijuana providers. Providers from both cities reported that patients infrequently disclose CAM use and almost half do not routinely ask patients about CAM practices. Most of the providers acknowledged that they lack information about CAM, and are concerned about the drug interaction as well as the effects of CAM on adherence. Our findings have important implications for understanding provider communication surrounding CAM use in a highly transnational population and context. Because CAM use may undermine ART adherence and is highly prevalent among Latinos, provider communication about

CAM is critical to improved health outcomes among HIV-positive Latinos. Considering the significant growth of U.S. Latinos, especially in the U.S.-Mexico border region, assessment of Mexican and U.S. provider training and communication needs surrounding Latino patient CAM use is warranted.

Keywords

Patient-Physician communication; HIV/AIDS; ART Adherence; alternative and complementary medicine; perceptions and attitudes

Throughout the world, the use of complementary and alternative medicine (CAM) is common among people living with HIV (Owen-Smith, DePadilla & DiClemente, 2011) and varies by gender, race/ethnicity, and country (World Health organization [WHO], 2011; Hsiao et al., 2006a; Goldstein et al., 2005; Neiberg et al., 2011). CAM includes a variety of health care practices and products that are not generally considered part of Western medicine or integrated into a country's dominant health system. It also includes regionally and ethnically-specific traditional medicine such as plant, animal and/or mineral based medicines, spiritual or manipulative practices (WHO, 2011; National Center of Complementary and Alternative Medicine [NCCAM], 2011a; Chen et al., 2009). In the U.S., CAM is used by 60-78% of HIV-positive individuals (Owen-Smith et al., 2011; WHO, 2011; Littlewood & Venable, 2011) and is particularly high among Latinos (Zúñiga de Nuncio et al., 2006; Zúñiga de Nuncio, Muñoz, Kozo, Blanco & Scolari, 2011; Jernewall, Zea, Reisen & Poppen, 2005; Zúñiga et al., 2011).

Common CAM practices among Latinos include Asian-origin CAM (e.g. acupuncture); herbs or plants; ethnomedicine (e.g. *sobadores*, *curanderos*) and vitamins (Yussman, Auinger & Pachter, 2006; Lafferty, 2004; McVea, 1997). HIV-positive Latinos may use CAM as a complement to or in lieu of antiretroviral therapy (ART), as part of culturally-mediated preferences, for HIV management or to relieve side effects, or because of limited belief in ART efficacy or poor access to care (NCCAM, 2011a; Chen et al., 2009; Littlewood & Venable, 2011). A number of CAM practices have gained wider acceptance among U.S. HIV care providers (Sussman, Williams & Shelley, 2010; Hsiao et al., 2006b) (e.g. acupuncture, yoga, meditation), however, there is limited understanding of clinician consideration surrounding CAM use among Latino patients with the exception of certain modalities with documented impact on ART efficacy (e.g. St. John's Wort, garlic) (Piscitelli, Burstein, Chaitt, Alfaro & Fallon, 2000; NCCAM, 2011b; Peltzer et al., 2009). Effective patient-provider communication is important to facilitate productive discussions about CAM practices and problems with ART adherence (Sussman et al., 2010; Shelley et al., 2009; Liu et al., 2009; Campo, Alvarez, Santos & Latorre, 2005; Kremer, Ironson, Schneiderman & Hautzinger, 2006a; Kremer & Ironson, 2006b; Campero, Herrera, Kendall & Caballero, 2007; Van-Servellen & Lombardi, 2005; Schneider, Kaplan, Greenfield, Wenjun & Wilson, 2004) especially among HIV-positive Latinos among whom reduced adherence to ART has been linked to use of plant or herbal based CAM (Zúñiga et al., 2011).

CAM use has been observed among HIV-positive Latinos living in the U.S.-Mexico border region where individuals frequently access clinical care and medications on both sides of the

border (Zúñiga de Nuncio et al, 2006; Zúñiga et al., 2011; Ransford, Carrillo & Rivera, 2010; Rivera et al., 2005; Wallace, Mendez-Luck & Castañeda, 2009). Binational care seeking behavior, including CAM access, has implications for HIV health outcomes (e.g., poor adherence), yet there is limited research with providers in the border region about CAM-related communication with their HIV-positive Latino patients. We undertook the present binational study to understand U.S. and Mexican provider beliefs and perceptions surrounding CAM use, and to learn if and how CAM communication occurs with patients.

Methods

Settings

The current qualitative study was conducted as part of a community-based participatory research study designed to identify barriers to care among HIV-positive Latinos in the San Diego-Tijuana border region (Zúñiga de Nuncio et al., 2011). We conducted in-person semi-structured interviews with HIV health care providers in San Diego and Tijuana. Potential participants were drawn from Mexican and U.S. HIV clinical and social service agencies, 4 in Tijuana and 3 in San Diego.

Recruitment and Procedures

Nineteen of 20 providers agreed to participate and provided voluntary and informed consent and permission to audio-record the session. Interviews were conducted by trained bilingual interviewers in Spanish (n=11) or English (n=8) in a private room at their work site and took approximately 45 minutes to complete. Participants were offered a gift card worth \$20.00 USD as a token of appreciation for their participation. The study protocol was approved by Institutional Review Boards at the University of California, San Diego and the General Hospital of Tijuana.

Interview procedures and guide

The lead study investigator (Zúñiga) provided extensive training in qualitative interviewing techniques to study team interviewers (Muñoz, Kozo and Servin) and all members conducted interviews (Spanish or English). Our binational research team developed the initial interview guide based on our ongoing border research. As new topics emerged from the interviews, we added additional open-ended questions to gain a deeper understanding of CAM perceptions and communication. The final 16-question guide included the context of CAM use among patients; clinician knowledge, perceptions and attitudes about CAM; types of CAM where providers generated a list of CAM modalities reported by their patients, barriers to health care access, including the role of CAM as an alternative treatment when medical care is limited; the role of CAM in managing the patient's HIV; and provider-patient communication about CAM use. Provider sociodemographic characteristics, years working with Latinos living with HIV and Spanish-language fluency (asked of San Diego providers) were also obtained.

Data analysis

Qualitative analysis procedures drew upon principles of Grounded Theory and constant comparison methods (Cobin & Strauss, 2008). The lead investigator (Zúñiga) and first

author (Muñoz) were responsible for training study coders in qualitative analysis methods used in this study. All interviews were digitally recorded and audio files were identified using unique ID numbers. Interviews were transcribed verbatim and analyzed in the interview's original language, allowing for identification of linguistic and cultural nuances that may be missed in translation. Our preliminary analysis focused on identifying themes related to providers' experiences and perceptions of CAM use among their HIV-positive Latino patients. Team members read three complete transcripts and met to discuss themes and develop an initial coding taxonomy with key themes and subcategories. Three coders independently applied the coding taxonomy to the first 4 pages (~16% of a given interview) of three interviews to establish inter-coder reliability and coding consistency. Coding discrepancies were discussed and consensus achieved to refine the final coding taxonomy. Next, we independently coded the three complete transcripts and achieved >80% agreement (Miles & Huberman, 1994). Our research team continuously discussed and reached consensus on emerging CAM themes and codes.

Results

Nineteen face-to-face qualitative in-depth interviews were conducted (July-December 2010) with HIV care providers in Tijuana (n=10) and San Diego (n=9). Providers included seven women and 12 men, the mean age was 45 years (range 27-59), and most were Latino. They included HIV specialists (n=12), general practitioners (n=3), nurse (n=2), HIV case manager (n=1), and psychologist (n=1), who reported working an average of 10 years (range <1 to 26 years) with HIV-positive Latinos. Of San Diego participants, seven reported that they felt “comfortable” or “very comfortable” communicating in Spanish and mentioned that over one-third (38% average) of their Latino patients bought or obtained medications or other treatment in Mexico. Participant characteristics are detailed in Table 1.

Emerging CAM-related themes are described as follows:

Provider's perceptions, attitudes and knowledge about CAM

Perceived role of CAM in HIV care—Some providers believed that in general, CAM use was harmless (n=7) and did not provide physiological benefits to managing HIV (n=9). They further mentioned that any perceived benefit may be attributed to a placebo effect. Some San Diego providers mentioned that CAM use may positively influence ART adherence and they commented that vitamins, relaxation techniques, and spiritual practices could prove beneficial because patients reported feeling better.

“...I don't see that as being very harmful to patients. I think it seems to be very empowering for them to take these or to use CAM and if that is helpful to them, then I think it's worth it”. –San Diego, male age 41

“...I would feel like someone who is seeking healthcare by using other methods you know by using complementary... they're more likely to probably be more adherent.”- San Diego, female age 34

Attitudes toward CAM use in HIV care—All San Diego participants and only one from Tijuana reported willingness to explore CAM use with their patients. One provider worried

that by saying something negative about patient CAM use, the patient may lose trust and choose to discontinue ART.

“...I support patients if that's what they want to do. They can do it in addition to taking their antiretrovirals...generally I never discourage it and try to be aware of what they are taking to make sure that they're not taking something that will have an interaction with the antiretrovirals”.- San Diego, male age 37

More than half of providers from Tijuana were not supportive of CAM because they are unfamiliar with CAM or because they believe CAM could negatively affect ART efficacy and HIV management. They commented that even after researching a specific type of CAM, they remained uncomfortable supporting its use because they still had doubts.

“...For questions of interference with the antiretrovirals, sometimes we don't know if this is happening or not, I always recommend to my patients not to use alternative medicine”.-Tijuana, female age unknown.

“...It will have a negative influence, I mean, if we add it to the already existing arsenal of medicines to choose from, it will confuse the patient...they may think that this [CAM] may be more useful than the medications they had been taking [ART].”-Tijuana, male age 52

CAM Knowledge—Most providers reported limited knowledge about CAM. Among Tijuana providers, half mentioned that they do not know anything about CAM and the other half reported that they are only aware of CAM use when their patients bring it to their attention. Four San Diego providers mentioned that they are very familiar with CAM and recommend yoga, relaxation techniques, or spiritual support to their patients. Some commented that their patients teach them about CAM treatments.

“...It's not uncommon that they [patients] bring some herbs... they show me the bottle or something and usually it is in Spanish, and I am like: ‘I don't know what it is’”. -San Diego, male age 41

“...Speaking personally, there is a lot I don't know about alternative medicine. I ask them to bring me their medicines or other information to help me find out if there are contraindications”. -Tijuana, male age 58

CAM modalities observed by providers and reasons their patients use CAM

Almost all participants (n=17) mentioned at least one type of CAM used by their patients. Both San Diego (n=4) and Tijuana (n=8) providers who are aware of patient CAM use reported that it is uncommon for their patients to disclose the use any type of CAM, while five San Diego providers mentioned that their patients frequently reported using CAM. CAM modalities mentioned by providers from Tijuana and San Diego included vitamin or protein supplements, herbal teas (e.g. chamomile), and home remedies (e.g. enemas, homeopathic medicine and yoga. Other types of CAM (e.g. silver infusions) or care sought from alternative practitioners such as *sobadores* (individuals who heal using specialized rubbing or massage) and *curanderos* or *santeros* (folk or spiritual healers) were reported only by provides from San Diego (CAM modalities are detailed in Table 2). Providers

mentioned that their patients obtained CAM from local stores (e.g., pharmacies) and five San Diego providers reported that their patients also sought CAM in Mexico. Reasons for patient CAM use included: to feel better, believing CAM can cure AIDS, to alleviate ART side effects, emotional support or help with HIV disease management.

Patient-provider communication about the use of CAM

Providers who communicate with their patients about CAM mentioned that they usually begin the conversation by asking the patient if they are taking something other than their antiretroviral therapy (n=6). However providers from both sides (n=16) reported that their patients commonly do not disclose CAM use due to lack of trust or fear of being judged.

“...Most of the Latino patients are not necessarily forthright in telling me about it. I don't know if it's because they're fearful of judgment perhaps or they just think: *‘the doctor doesn't believe in it so why should I even open that box’*, so to speak”.-San Diego, male age 41

“...I hear them [patients] say things like: ‘Well, I couldn't tell anybody else this, I can't tell my partner, I can't tell my friend, I've never told a doctor this because I would think they would lock me up’” -San Diego, female age 38

Providers from both sides (n=7) recognized that they routinely do not ask their patients about CAM:

“...this is not a topic about which the patient is open to tell me about and I myself am not very interested in asking what they are taking...”-Tijuana male provider, age 54

“...I am not routinely asking about it, perhaps I should. I am trying to be more proactive about asking about herbal and complementary and alternative treatments”.-San Diego, male age 42

Discussion

Our primary findings indicate that both Mexican and U.S. providers recognize that CAM use is a common practice among their Latino patients, binational CAM practices are common, and that an open and trusting patient – physician relationship can lead to CAM use disclosure. Most providers acknowledged that they lack information about CAM, are concerned about its interaction with ART as well as its effects on adherence. A discussion of these findings and implications follows.

According to previous studies, HIV-positive Latinos living in the U.S.-Mexico border region frequently cross the border (north and south-bound) to seek health care and medications (Zúñiga de Nuncio et al., 2006; Zúñiga et al., 2011; Rivera et al., 2005; Wallace et al., 2008). Our study revealed that San Diego HIV-care providers reported that at least one-third of their Latino patients cross the border to Mexico to obtain medications or CAM. For example, one provider in San Diego reported that even if his patients have access to HIV treatment, 85% of his patients seek CAM in Mexico to alleviate health problems.

We found that most providers were able to list common types of CAM such as teas and vitamins, which is consistent with other studies with HIV-positive individuals. (Littlewood & Vanable, 2011; Zúñiga de Nuncio et al., 2011). Providers on both sides of the border have varying degrees of CAM knowledge and their perceptions and attitudes were based on their level of familiarity. Providers who did not support or were unfamiliar with CAM reported not having enough information about the effects of certain CAM types. Concern about CAM's effect on adherence and its potential negative interaction with ART (Piscitelli, et al., 2000; Mills, Montori, Perri, Phillips & Koren, 2005) was more common among some Tijuana providers who did not think that their patients used CAM. In contrast with this finding, our earlier work indicates that CAM use is fairly common (67%) among HIV-positive Tijuana patients (Servin, Muñoz, Strathdee, Kozo & Zúñiga, 2012). Integrative medicine is less common in Mexico and provider lack of awareness of patient CAM use may be because it is not currently part of formal physician training which focuses more on evidence-based medicine. San Diego providers who reported greater familiarity with CAM also tended to be more supportive of its use. In general, providers in our study held both negative and positive views about CAM and were concerned primarily with potential CAM-ART interactions. These findings, along with previous studies, suggest that physician training about CAM may be needed in order for providers to appropriately advise patients, especially in the US-Mexico border region where clinical populations are often shared (Gaylord & Mann, 2007; Sewitch, Cepoiu, Rigillo & Sproule, 2008).

The patient – provider relationship plays an important role in patient outcomes (Conboy et al., 2010), especially in chronic diseases including HIV. Some San Diego providers emphasized that after establishing trust, patients are more likely to share information. Others felt that some patients simply do not disclose CAM use out of fear of being judged by the provider. Many Tijuana providers admitted that they do not ask their patients about CAM use at all to avoid making the patient uncomfortable.

Given that CAM is frequently used by HIV positive Latino patients to cope with the disease or ART side effects (Huber & Guillion, 2003; Moltó et al., 2011; Hasan et al., 2010) and the potential impact of CAM use on ART adherence (Littlewood & Vanable, 2011; Huber & Guillion, 2003), CAM use is a necessary subject of conversation during patient clinical encounters. Previous research has found that most patients do not disclose their CAM use unless they are asked directly by the provider (Shelley et al., 2009; Liu et al., 2009; Kremer & Ironson, 2006b). It is essential for providers to establish a good relationship with their patients, gain their trust and discuss patient CAM use in a nonjudgmental manner. Given that the U.S. southern border with Mexico is one of the most rapidly growing regions in the U.S., enhanced clinician training in cross-cultural communication and elicitation of sensitive information such as CAM use and medication-seeking behavior in Mexico, will be imperative to promote delivery of culturally-effective care to Latinos.

Study limitations include the limited number of providers who were interviewed and that our findings may not be generalizable to other health care providers or settings. However, this qualitative research elucidated similarities and differences between U.S. and Mexican providers who may serve the same patient population, opening opportunities for better informed research with clinicians in border settings to improve the health of transnational

populations. A larger, quantitative study with border region providers would allow for improved understanding of considerations to promote effective CAM discussions with HIV-positive patients.

Conclusions

To our knowledge this is the first study to simultaneously ask Mexican and U.S. providers about their Latino patients' CAM use. Because many clinicians in this region may serve patients who seek health care or services on both sides of the border, our study findings may lead to improved understanding of binational patterns of CAM use among HIV-positive Latinos. Equally important is the ongoing research about CAM and ART interaction as well as the potential benefits that these therapies may have for persons living with HIV. Given the limited clinical time for patient visits, future research should also explore interventions designed to promote efficient CAM discussions or use of allied health personnel (e.g. treatment adherence counselors) who are trained in discussing CAM with patients. U.S. provider awareness of CAM use among their Latino patients may become more imperative if newly proposed U.S. health care legislation reduces access to ARTs for some members of the U.S. Latino population (e.g. undocumented persons). Provider-oriented interventions to improve knowledge and culturally-effective elicitation of patient CAM use may be warranted in the U.S. and Mexico.

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Table 1
Sociodemographic characteristics of HIV health care providers from clinics in San Diego-Tijuana border region

Description	Number of Participants(<i>n</i> =19)	
	<i>n</i>	%
Age		
Mean (SD)	45(9)	
Range	(25-59)	
Gender		
Male	12	63%
Female	7	37%
Ethnicity		
Mexican/Hispanic/Latino	13	68%
Non-Latino White	3	16%
Korean/Japanese	2	11%
Greek	1	5%
Site		
Clinics from Tijuana	10	53%
Clinics from San Diego	9	47%
Current position at the clinic		
HIV specialist	12	63%
General practitioners	3	15%
Nurse	2	11%
HIV case manager	1	5%
Psychologist	1	5%
Years of work experience with HIV-positive patients		
< 1 year	2	11%
1 – 10 years	7	37%
11 – 20 years	8	41%
> 20 years	2	11%

Table 2

Selected modalities of complementary and alternative medicines and treatments used among HIV-positive Latino patients reported by HIV health care providers from clinics in San Diego and Tijuana.

Description	San Diego Providers (n=9)		Tijuana Providers (n=8) ^a	
	n	%	n	%
Type of CAM ^b				
Vitamins and protein supplements	9	100%	5	63%
Herbal Teas	6	67%	6	75%
Home remedies	3	33%	3	38%
Homeopathic	2	22%	3	38%
Acupuncture	2	22%	0	0
Yoga and Meditation	1	1%	2	25%
Silver infusions	3	33%	0	0
Melatonin	2	22%	0	0
Healers (<i>Sobadores, Curanderos, Santeros</i>)	3	33%	0	0
Other (<i>Uña de Gato, garlic</i>)	4	44%	3	38%

^a Excluded two Tijuana providers that reported their patients do not use any type of CAM.

^b The list of CAM type was generated based on the examples given by providers. Participants provided more than one type of CAM.