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Medicina Conductual

Cognitive-behavioral Interventions for condom use in women with HIV: Evidence-based analysis toward need detection

Intervenciones cognitivo-conductuales para uso del condón en mujeres VIH positivas: Análisis basado en evidencia hacia la detección de necesidades

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Women with HIV use condoms in a non-consistent way, putting themselves at risk of reinfection. Cognitive-behavioral interventions (CBI) have shown a reduction on risk behaviors in general, but in the case of women, the results are so diverse that they hinder the implementation of effective interventions to increase condom use in women with HIV. An evidence-based review of research articles was carried out to assess the effectiveness of CBI in the promotion of condom use in women with HIV. Articles in Cochrane, PubMed and Redalyc were selected. Duplicates were eliminated, as well as articles which did not include CBI in their procedures. A total of 2795 articles including data from 964 participants were analyzed. The results are described in terms of type of study and the purpose of the interventions: Aimed to the correct use of the condom in women with HIV; as well as partner violence in women and finally those aimed at examining coping strategies in people living with HIV. Interventions aimed at promoting correct use of condoms through behavioral elements did not show positive results in women, it is proposes considering the variable "assertive sexual communication" and gender factors, such as partner violence.

Keywords: Condom use promotion; HIV; Women; Partner violence; Cognitive-behavioral intervention, Assertive sexual communication.

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Del 40 al 70% de las mujeres con VIH usan inconsistente el condón poniéndose en riesgo de reinfección. Las intervenciones cognitivo-conductual (ICC) han mostrado reducción de conductas de riesgo principalmente en hombres que tienen sexo con hombres. En el caso de las mujeres, los resultados son divergentes. Se realizó una revisión basada en la evidencia de artículos de investigación para evaluar la eficacia de las ICC en la promoción del uso del condón en mujeres con VIH. Se eligieron artículos de Cochrane, Pudmed y Redalyc. Se eliminaron los duplicados y los que no incluían una ICC en su procedimiento. Se analizaron datos de 964 participantes y 2795 artículos. Los resultados se describen en la dirección de las intervenciones: Hacia el uso correcto del condón en mujeres con VIH; a la violencia de pareja en mujeres y finalmente referentes al afrontamiento en personas con VIH. Las intervenciones dirigidas a promover el uso correcto del condón cuyos principales componentes fueron conductuales (comunicación asertiva y técnica correcta de colocación del condón), no mostraron resultados positivos en mujeres, lo cual puede mejorarse al considerar la variable "comunicación sexual asertiva" y algunas cuestiones de género como la violencia de pareja.

Palabras clave: Promoción del uso del condón, Mujeres-VIH; Violencia de pareja; Intervención cognitivo conductual; Comunicación sexual asertiva.

INTRODUCTION

The incidence rate of HIV in women is increasingly higher. This number has increased in over six times, going from 6 thousand to 37 thousand women from 1990 to 2013 (CENSIDA, 2015a) and it is mainly sexually transmitted, in heterosexual partner and with a steady partner. Even though sex with protection is the most effective way to prevent infection, it is known that 7 out of every 100 could not negotiate the use of condom with their partners (CENSIDA, 2015b). If this were not enough, research carried out in very diverse countries (from low, medium and high income) show that between 40% and 70% of women with HIV use condom in a non-consistent way with their steady partners (Nöstlinger et al., 2010; Peltzer, 2014), that is, they do not use a condom every time they have sex that includes vaginal or anal penetration.

This is a very relevant aspect, because it sets these women at risk for reinfection, or getting infected with another STD, and as a consequence, they have more clinical manifestations, evolution to AIDS and more medical expenses (Secretaría de Salud, 2010). This is the reason behind the assumption of the importance of interventions as a preventive measure so that women with HIV can use the condom. Regarding this matter, the CBI have shown an increase in condom use, however, these interventions have been implemented mainly in men who have sex with other men (Carvalho et al., 2012).

Only a few studies have dealt with the effects of gender differences and the results are dissimilar in the reduction of sexual risk behaviors in women (Saleh-Onoya et al., 2009). Therefore, the absence of solid evidence in this area represents an obstacle to design and implement effective interventions that may increase the use of condoms between women with HIV.

The main objective of this article is to analyze the existing evidence on CBI in the promotion of condom use in women with HIV.

METHOD

As recommended by the Oxford Centre for Evidence-Based Medicine, a review was carried out, based on the evidence of research articles.

Procedure

First, systematic reviews and controlled random trials were searched (evidence level 1 and 2). Then, group studies, case study series, correlational studies and in general, analytical-observational studies were analyzed (evidence level 3 and 4), and finally, experts opinions or the mechanisms based on reasoning corresponding to evidence level 5 were analyzed (OCEBM Levels of Evidence Working Group, 2011).

Subsequently, based on the tool PICO (PIO, if there is no any type of intervention to be compared to), the acronyms and components were selected (See Table 1). In order to obtain synonyms and words related to every one of the terms of the PIO elements, a search was carried out on the Internet, on the page MESH Headings, (See Table 2), which represents a list of controlled terms that provides uniformity to the vocabulary to index articles in databases, describing their contents using key words (Landa-Ramirez & Arredondo-Pantaleon, 2014).

Once keywords were identified and the term-crossing was conducted, the article search began from October 2014 to November 2015. A total of 187 articles were obtained because their title included at least two keywords. All of them belonged to three databases: Cochrane, PubMed and Redalyc. A total of 96 articles were eliminated because they were duplicated, therefore, the abstracts of 91 articles were read and 74 were discarded because they did not include cognitive-behavioral interventions in their procedure (Figure 1) Therefore, a review of 17 articles was performed and the data of 964 participants and 2795 articles was analyzed.

Table 1
Description of PIO Components

Keywords		
Population	Intervention	Results
Women HIV	Cognitive-behavioral therapy	Depression
Women AIDS	Coping style	Posttraumatic Stress Disorder
Domestic violence	Coping with stress	PTSD
Partner violence	Behavioral therapy	Emotional aspects
Emotional violence	Cognitive therapy	
	CBT	

Note: The acronym PIO (instead of PICO) is used because the study did not include comparing any type of intervention. The clinical research question was employed since it is a particularly useful tool to improve conceptual specificity and clarity of clincal problems under study, also they result in more accurate data (Van Loveren & Aartman, 2007; Nobre, Bernardo & Jatene, 2003; Landa-Ramirez & Arredondo-Pantaleon, 2014).

Table 2
Keywords related to each PIO element

P	I	O
Women, HIV.	Cognitive-behavioral therapy.	Negotiation skills.
Women, AIDS,	Behavioral therapy.	Consistent condom use.
Domestic violence	Cognitive therapy.	Decreased risk of reinfection.
Partner violence	CBT.	Risk of sexually transmitted diseases.
Emotional violence	Condom use.	
	Negotiation skills, condom use.	

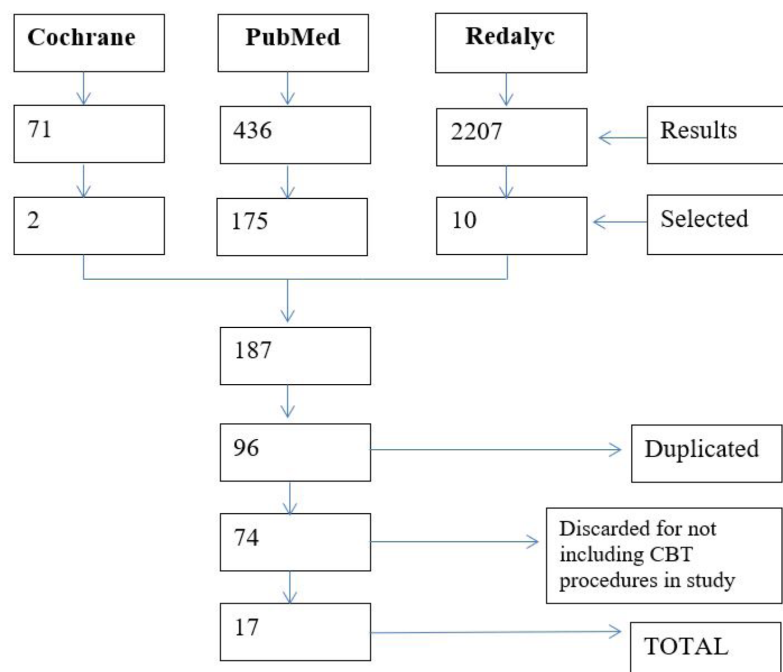

Figure 1. Integrated flow chart of article selection procedures

RESULTS

As a starting point, you can find the description of the studies directed at the implementation of cognitive-behavioral interventions to increase the consistent and correct use of the condom, as well as to increase assertive communication in women with HIV (Table 3).

The studies (two systematic reviews, one with meta-analysis, two controlled and random studies and a quasi-experimental study) aimed at promoting consistent condom use and whose interventions were centered in the ability to place the condom correctly and in the ability of general assertive communication showed, after the general analysis, the expected effects, that is, more consistency in the use of condom. However, those studies which evaluated the results of the interventions separating them by gender found out that there were no meaningful differences in women, which means, they did not show an increase in condom use. On that subject, two main points that might be limiting the results on women were identified.

The first point shows that in order to favor the use of condom in women, the variables "behavioral training to correctly place the condom" and/or "the information about the consequences of not using condom correctly and consistently" should not be the only ones to be considered. Studies should also consider more specifically "assertive communication" as variable, more specifically "assertive sexual communication" variable. Participants must be trained in assertive communication, specifically regarding negotiation of the use of condom, since talking about sexuality poses a greater challenge because it is frequently considered a taboo topic (Robles et al., 2006; Santos, Iglesias, & Sierra, 2010; Wechsberg et al., 2010). In addition, sexual assertiveness was identified as a protective factor in the face of sexual victimization and coercion, with different types of attackers and it was also related to condom use and to the intention to use it. The authors suggest to evaluate the scope of the intervention in other types of violence (Santos-Iglesias & Sierra, 2010).

The second point is related to the inequalities by gender, especially the traditional Mexican behavioral rules that dictate sex between man and women, where power relationships are favored and women are usually in a disadvantage regarding rights and freedom (Herrera & Campero, 2002). This is important in the context of the conclusion that one of the main reasons for not using a condom was "to please the partner", mainly out of fear. This is probably why the authors highlighted the importance of addressing partner violence issues, an aspect that may interfere in the negotiation of the use of a condom (Carvalho et al., 2012).

Another result of this review is actually focused on those studies directed to cognitive-behavioral interventions for the attention of partner violence in women (See Table 4).

The analysis of a systematic review with meta-analysis on three controlled random studies and five quasi-experiments is shown in Table 4. In sum, the cognitive behavioral therapy showed positive effects in the reduction of mild partner violence. Some authors have named it "situational partner violence" or "subtle violence". This last term refers to the difficulty to identify this variable and recognize it on the basis of a reliable definition (Moreno, Chapa, & Rivas, 2016).

In general, these interventions emphasize the importance of providing participants with abilities to cope with emotion and using active problem-oriented problem-solving. However, none of these studies described the components of the intervention in detail (in order to allow for replications).

Regarding serious partner violence experienced by women, promotion support therapy (which refers to providing victims with legal support, protection houses, financial support, self-employment programs, etc.), has proven to be efficient to reduce partner violence. In this case, the priority is to safeguard the women exposed to this type of violence. Under this assumption, it would be practically impossible for women to use strategies of active confrontation, such as negotiation since they can put themselves in a higher risk because of the minimal or non-existent emotional regulation of the partner (Alonso & Labrador, 2010).

Having said that, it is known at this point that interventions directed to provide women with the abilities of active confrontation have an expected impact on mild partner violence. Therefore, a third result is then directed to cognitive-behavioral interventions addressing the confrontation styles in people with HIV (Table 5).

As can be observed in Table 5, three systematic reviews (one of them with meta-analysis), and two controlled random trials were analyzed. Among the main results, it is stated that individual, as well as group cognitive-behavioral therapy, leads to beneficial results for the reduction on the stress and depression symptoms. Some interventions (those including self-efficacy) also showed beneficial changes in the immunological indicators in the expected direction. It is also pointed out that the main components of the intervention were cognitive re-structuring, problem-solving and assertive abilities. These interventions had an average duration of 12 sessions.

An important limitation was the under-representation of women in these interventions. Research showed that women attended the first sessions, but the majority of them did not complete the treatment. As already mentioned, a possible explanation may be found in the perceived cultural barriers and in the social determinant. For instance, most women with HIV consider that their health care can wait and that family health care and attention is more important (Johnson et al., 2015; Arrivillaga, 2010).

DISCUSSION

Results of the present analysis tend to cluster around three directions: Interventions focused on the correct use of the condom in women with HIV; partner violence (PV) in women and

Table 3
Cognitive-behavioral interventions aimed at increasing adequate-consistent condom use and assertive communication by HIV-infected women

AUTHORS	DESCRIPTION	OBJECTIVE	RESULTS: CHANGES BY VARIABLE	LIMITATIONS-RECOMMENDATIONS
Carvalho et al., (2012)	Systematic review and meta-analysis. Five controlled-randomized studies with cognitive-behavioral interventions.	To evaluate the effectiveness of behavioral interventions (information, counseling, coping skills) to promote healthy sexual behaviors (consistent condom use) in women with HIV (clinic outpatients).	Interventions showed improved condom use in men but not in women.	Measurement of "consistent condom use" was dichotomic. Did not include interpersonal context which often includes: • Coercion, sometimes violent. • STDs as indicator of intervention effectiveness. • More heterogeneous samples (looking to get pregnant, with stable partners, with occasional partners, etc.).
Saleh-Onoya, Reddy, Ruiter, Sifunda, Wingood & Borne, 2009.	Controlled randomized study (49 control and 54 experimental women).	Health education intervention aimed at improving coping skills. The intervention consisted of four four-hour sessions of sexual risk reduction and coping training (Session 1 focused on enhancing the self-esteem; session 2 assertive communication skills; session 3 HIV and STI infection and re-infection knowledge; and session 4 healthy and unhealthy relationships).	Women in the experimental group showed significantly better self-esteem and less STDs through improved adherence to STD treatment. Consistent condom use did not improve. Authors propose that this effect may have stemmed from the fact that control women frequently attend workshops on condom use at the clinic.	• Try to recruit larger samples. • Using closer matching of Comparison groups. • Using statistical tests closely related to measurements' (scales, etc.) actual features.
Wechsberg, Luseno, Kline, Browne & Zule, (2010).	Cuasiexperimental Study, N= 583.	To examine the association between condom use and negotiation skills (assertiveness: starting a conversation and persuading partner). Participants included women with HIV, without HIV, and with unknown status.	Better negotiating skills were associated with better condom use, regardless of being or not infected. Stastistical relevance favored HIV-positive and unknown status, as compared to the usual treatment provided at the clinic. Sexual workers showed better condom use by their clients but not by their personal sexual partners, and reported higher levels of sexual coercion or violence by partners.	Measurement of "consistent condom use" was dycotomic. Authors suggest: • Developing and testing interventions to reduce coercion (gender inequality). • Collect follow-up measurements. • Use reinforcement procedures after interventions.
Santos-Iglesias & Sierra, 2009.	Systematic research literature review.	To revise the research literature and summarize information on sexual assertiveness in different areas (Psychology, Sociology or Medicine). The chosen articles clearly operationalized the variable "sexual assertiveness".	Greater sexual assertiveness is related to the use of condoms consistently and with the intention to use. Sexual assertiveness acts as protective factor against risky sexual behaviors, victimization and sexual coercion.	• Exploring the effect of assertiveness on other types of violence against women. • Including sexual assertiveness in preventive or treatment interventions. • No intervention was applied to HIV-positive women. • Questionnaires showed shaky psychometric features.
Robles et al., (2006).	Controlled randomized trial.	Examining the effects of behavioral training on sex-related communication skills and correct-consistent condom use by university students. The training based on structured learning and consists of four techniques: modeling (skill demonstration), role play (the systematized behavioral practice of the skill observed in modeling, using semi-structured situations very similar to a natural situation) , feedback (it is a technique that allows the evaluation of the participant making critical comments) and transfer (aims to facilitate the extension of behaviors recently learned in the training environment to situations of daily life)	Significant improvement of skills to start and maintain sex-related conversations and negotiate condom use. Consistent condom use increased in the experimental group. No differences in consistent condom use occurred either in sexual encounters in general or during the last one.	The intervention was conducted in consecutive days in contrast with the widespread recommendation (by the Structured Learning Theory) to wait for a week between sessions. Authors suggest: • Taking measures to evaluate the generalization of effects to other contexts/settings. • Evaluating skills to use female condom • Collect follow up data • Increase the number of role-playing sessions.

Table 4
Cognitive-behavioral interventions to reduce partner violence against women

AUTHORS	DESCRIPTION	OBJECTIVE	RESULTS-FINDINGS	LIMITATIONS-RECOMMENDATIONS
Tirado-Muñoz, Gilchrist, Farré, Hegarty & Torrens, (2014).	Systematic review and meta-analysis of interventions (controlled-randomized trials) aimed at reducing violence against women (1990-2013).	To compare the effectiveness of CBT with in-place strategies to reduce any type of partner violence in victimized women. Trials were eligible for inclusion if 1) they were randomized controlled trials or cluster randomized trials, 2) the outcome was the frequency or occurrence of IPV, and 3) they compared advocacy or CBT interventions to usual care. Screening interventions only and interventions delivered at home for domestic violence (mothers and children) were excluded.	CBT and health promotion are effective to decrease physical, psychological and sexual violence. CBT reduces violence but not PTSD symptoms.	Widely heterogeneous interventions Authors suggest: • Using a comparison (“control”) group. • Compare promotion activities and CBT separately • Once evaluated, include promotion activities in all interventions.
Bass et al., 2014.	Controlled randomized, pre-post-follow up study.	To evaluate the effectiveness of a CBT intervention to decrease depressive and PTSD symptoms in women victims of sexual violence	CBT was effective in improving symptoms as compared to individual social support.	• Authors do not provide enough detail on the intervention procedures. • Groups were not comparable regarding initial depressive and PTSD symptoms.
Cruz-Almanza, Gaona-Marquez & Sanchez-Sosa, (2006).	Multiple baseline and an accidental control condition. Pre-posttest comparisons and 3, 6 and 18 month follow up.	Evaluating a group (Rational, Emotive, Behavioral Therapy, REBT) intervention to promote improved coping and self-esteem on 18 women abused by their problem drinking spouses. The intervention goals included three main target components: a) identifying and correcting cognitive biases and defective information, b) establishing emotional regulation strategies, and c) acquiring assertive interpersonal skills.	REBT led to relatively stable improvement in the medium and long run on 3 of the 4 clinical dimensions: self-esteem, coping strategies and assertive behavior.	• Authors recommend using improved behavioral recording procedures and scales.
Crespo & Arinero, (2010).	Controlled randomized study (no exposure)	Evaluating the effectiveness of a CBT intervention for women with clinical symptoms, victims of violent partners including some PTSD symptoms. The intervention including exposure technique psychoeducation, breath control, training to improve self-esteem, cognitive restructuring, problem-solving, planning pleasant activities, and relapse prevention	A cognitive-processing intervention led to reducing PTSD symptoms.	• The control group had zero intervention • Small number of participants. • The study did not include women with HIV or other medical condition. • Authors suggest: Designing and using interventions better suited to specific clinical needs of participants.
Iverson et al., 2011.	Controlled trial (3 groups): CBT, traditional therapy and Exposure to traumatic event.	Examined the effectiveness of Cognitive Processing Therapy (CPT) on risk for future victimization on survivors of couple violence. Therapy includes education about PTSD, identification of relationships between events, thoughts, and emotions and the development of alternative, more balanced thinking.	Women who showed improvement of PTSD and depressive symptoms were less likely to report partner violence six months later.	• The study did not include neither a control (untreated group) • Nor sexual violence data • Authors suggest: • Longer follow up period (over six months). • Collect data on self-esteem

Table 4 *Continued*

AUTHORS	DESCRIPTION	OBJECTIVE	RESULTS-FINDINGS	LIMITATIONS-RECOMMENDATIONS
Labrador y Fernández, (2009).	N=1 quasiexperimental design with repeated measures (pre, post & follow up).	To examine the effectiveness of brief individual CBT on PTSD symptoms in women victims of partner violence. This intervention is characterized by 1) including techniques that have been shown to be effective (psychoeducation, activation control, cognitive therapy and exposure therapy, 2) being a short program (8 sessions of 90 minutes), 3) being able to take performed in the usual environment, and 4) be a group treatment.	The intervention was effective in reducing PTSD symptoms including depression, dysfunctional cognitions, and improved self-esteem and social adaptation. Improvement persisted after six-month follow up.	• The intervention is not replicable (no detailed account of procedures is provided).
Alonso y Labrador, (2010).	Quasiexperimental two independent groups study (control and treatment) repeated measures in pre-treatment, posttreatment and follow up.	To examine the effectiveness of a brief-specific CBT treatment on PTSD symptoms of women victims of partner violence.	About 70% of participants improved on TEPT symptomatology and related problems (depression and self-esteem).	• Small “N” • Randomizing group’s conditions • Authors suggest: • Including self-esteem as specific Dependent Variable to receive treatment
Littleton, Buck, Rosman & Grills-Taquechel, (2012).	Quasiexperimental N=1, pre-post.	Evaluating the effectiveness of an online CBT intervention on women victims of sexual violence.	Depression and PTSD symptoms improved after treatment, including reducing cognitive distorted beliefs and fear of sexual contact.	• Not being able to provide immediate assistance when doubts or questions (by participants) arose. • Lack of comparison group condition.

Table 5
Cognitive-behavioral interventions for the attention of coping styles in people with HIV (Intervenciones cognitivo-conductuales para la atención de los estilos de afrontamiento en personas con VIH)

REFERENCE	DESCRIPTION	OBJECTIVE	CHANGE FOR VARIABLES AND RESULTS	LIMITATIONS-RECOMMENDATIONS
Brown and Vanable (2011).	Systematic review of 21 interventions for the stress management in people with HIV.	Assess the stress management interventions.	The stress management interventions based on TCC reduce anxious and depressed symptoms in persons with HIV and improve the social behavior. Mindfulness has also shown positive effects in stress management, nevertheless, more evidence is needed.	It is suggested: • Mindfulness to specific subpopulations, there is a need to adapt the interventions to populations that face specific challenges not only HIV.
Sherr, Clucas, Harding, Sibley & Catalan (2011).	Systematic review of 97 interventions.	Provide a global understanding of those interventions that attend the relation between HIV and depression.	The interventions were categorized in psychology, psychotropic, psychosocial and physical, specially TCC. There are few interventions directed to women, nevertheless, they seem to respond very well to the descriptions above.	It is suggested: • Homologate the measures to assess depression. • Adapt interventions for minorities, such as women.
Honagodu, Krishna, Sundarachar, and Lepping (2013).	Systematic review and meta-analysis of 1761 controlled and randomized trials.	Describe the evidence available about the effectiveness of psychotherapy in the management of depression in persons with HIV.	Group psychotherapy focus on cognitive-behavioral therapy (TCC) is an intervention effective to decrease depressive symptoms on persons with HIV.	None of the trials assess the results of individual psychotherapy vs group psychotherapy. It is suggested: • Take into consideration specific situations of men and women with HIV, such as Human Papillomavirus (HPV).
Sikkema, Hansen, Kochman, Tate and Difranceisco (2004).	Controlled and randomized trial.	Explore the impact of a coping intervention based on cognitive-behavioral therapy in a group of men and women with HIV who had lost a loved one in the last 2 years.	Decreased anxiety in men and women in the intervention. Women in the intervention group showed statistically significant less depressive symptoms compared with the rest of the participants.	• More than a half of the men assigned to the intervention group did not complete the sessions. • They did not report biological indicators. • There was no follow-up evaluation. It is suggested: • That interventions address gender issues: the main sources of stress for women were the adaptative problems related to the children and/or spouses (those who infected them with HIV), family responsibilities and roles of care. • For homosexual men, the death of friends, stigma and social rejection by members of the family and the community.
Ironson et al. (2005).	Controlled and randomized study (56 women in experimental condition).	Explore if the changes in the self-efficacy in the context of a cognitive-behavioral intervention are related with changes in biological markers (CD4, viral load (CV)) and in the psychological well-being.	Decrease of depressive and anxious symptoms, and in the biological markers in the expected direction (decrease of CV).	• The size of "n" is small. It is suggested: • Include the variable "self-efficacy" in future interventions for decrease CV, since people who believe that having the skills to prevent re-infection and the skills to stop the development of symptoms really seem to have better biological results. • The intervention tries to improve self-efficacy through training the participants a variety of coping strategies (e.g. cognitive restructuring, relaxation exercises, assertive behaviors).

finally the ones focused on the coping mechanisms of people with HIV. Interventions directed to training the correct use of condoms and assertive communication did not show benefits for women. Two main points might be limiting the expected results on women. The first makes reference to the consideration of the variable "ability of sexual assertiveness" because the interventions which included this variable showed more positive effects that those that only included a behavioral intervention (the ability to place the condom correctly and general assertiveness; Robles et al., 2006).

The second point is related to gender issues (Herrero & Campero, 2002). Regarding this matter, Barroso et al. (2008) have proposed a model of sexual femininity, which refers to the passiveness women show in the decision-making process regarding sexuality, including a condescending attitude, as well as the perceived obligation to please her partner even at the expense of sacrificing her own desire or will. These sexual behavior "unspoken rules" may limit the possibility that women, on the one hand, ask for the use of a condom to their partners, and on the other, negotiate in case the partner does not want to use one.

These proposals point to the need to consider the variable "partner violence" (Carvalho et al., 2012; Ruiz, Díaz & Villalobos, 2012) because it has been suggested that said variable contributes to the dissemination of HIV, it reduces the capacity of women to face HIV and it can lead to impediments when negotiating safe-sex practices because of the dynamics of power abuse (OMS, 2014; United Nations WOMEN, 2014).

On the other hand, the interventions directed to the reduction in partner violence suggest that the therapy oriented to the style of active confrontation usually shows the expected results in the cases of mild violence. These interventions require an average of 12 one-hour sessions. However, treatment duration seems to be an impediment for women to finish their treatment because most of them usually abandon it.

It is important to highlight that the conditions of HIV and partner violence, even if they have shown a close relationship, were not addressed jointly in any of the reviewed studies. One of the reasons may be that although the intervention for the reduction of partner violence requires from 10 to 12 sessions, this number might increase if other aspects related to the negotiation of the use of condom were addressed.

Throughout the analysis of the research literature, another limitation was observed: the way the variable "consistent use of the condom" was measured, since it was done under a dichotomic (yes-no) approach, which limits being able to identify the levels of behavior, and, as a consequence, it may seem that there is no impact with the applied intervention (Carvalho et al., 2012).

It should be noted that CBT aimed at coping and violence also showed benefits in some emotional factors, for example, reduction of post-traumatic, depressive, anxious and victimization symptoms. As well as increase in self-esteem and social adaptation Crespo & Arinero, 2010; Tirado-Muñoz et al., 2014).

CONCLUSION

It is therefore essential to design and/or adapt interventions that have an impact, on the one hand on the negotiation abilities with the partner, specifically for the consistent and correct use of the condom so they have an impact on the effective abilities for conflict management in partner and to the maladaptive emotional symptoms (depression, post-traumatic stress, victimization). This may, in turn, help prevent partner violence. It also seems important to shorten the duration of the intervention, in such a way that women do not have to interrupt their routine for several days or even abandon the treatment. Additionally, it is also suggested that the interventions aimed at promoting the use of condom in women with HIV focus on addressing the ability of assertive sexual communication and partner violence. It is also recommended to use reliable behavioral measures and shorter interventions (probably no more than 6 sessions) for women.

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