

Review

Integrative review of the evaluation of health communication campaigns for HIV prevention in Latin American mass media*

Revisão integrativa sobre avaliação das campanhas de comunicação em saúde para prevenção do HIV nos meios de comunicação da América Latina (resumo: p. 16)

Revisión integradora sobre la evaluación de las campañas de comunicación en salud para la prevención del VIH en medios de comunicación masiva en América Latina (resumen: p. 16)

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An integrative review of the literature of the last thirty years on evaluations of HIV prevention strategies implemented in the mass media in Latin America was conducted. A total of 246 documents were identified, of which 12 met the selection criteria and 15 campaign evaluations were identified. The results indicate that the most commonly used message was to promote the use of condoms. Most evaluations focused on remembering the message of campaigns and media exposure. Only three yield results on knowledge assessments and two on attitudes to condom use; nine reported behavioral changes. In conclusion, there are few articles with evaluation results. The assessment of behaviors is increasingly taken into account. Pre-experimental evaluation designs are used.

Keywords: Campaigns. HIV/Aids prevention. Social marketing. Health communication. Latin America.



Introduction

Despite the efficacy demonstrated by antiretroviral treatments, the Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) pose a serious global problem. It is estimated that in 2017 36.9 million people were living with HIV worldwide, of which 1.8 million live in Latin America¹. Mass media campaigns have become a priority for preventive efforts in the fight against HIV and research has been instrumental in making progress against the spread of the epidemic². However, it is recognized that HIV advertising campaigns in general, and especially those broadcasts on television, have shown very little effect in achieving changes in risk behaviors³. At this moment everything seems to indicate that the epidemic spreads much faster than the preventive actions that seek to stop it. Sharing successes, failures, and lessons learned can contribute to a reverse of this trend⁴.

According to Breton⁵, in the absence of a preventive vaccine for HIV, campaigns advocating safe-sex to prevent the epidemic have been positively assessed. In 1987, HIV prevention campaigns began to be broadcast⁶, becoming in many countries one of the most important resources for transmitting preventive information⁷.

There is important literature on prevention-oriented health campaigns that report evaluations of successful campaigns and their most common shortcomings. Since a long time ago, Rogers & Storey⁸, in reviewing campaign history, consider the 1940s and 1950s to be an era of minimal effects, when many large-scale campaign efforts failed. The 1960s and 1970s marked the beginning of campaigns that were successful and, principles of effective campaign design were formulated, including: 1) using a formative evaluation for their design, 2) setting reasonable goals, 3) using audience fragmentation, and 4) considering interpersonal communication networks. These principles coincide with those that Noar⁹ propose recently and considers necessary to guarantee the success of a health campaign. Finally, the 1980s and 1990s are defined as an era of moderate effects.

As for the effect of the campaigns, there has been an important debate. Since the late '80s, authors such as Flay & Cook¹¹¹ suggested that social marketing rarely changes behavior directly, but instead creates awareness, modifies or influences perceptions, and provides motivation to change attitudes about an issue¹¹. Based on the results of a 2004 meta-analysis, on the contrary, they affirm that campaigns promoting the adoption of healthy behaviors are associated with small but significant changes in behavior. In the same vein, Noar² argues that the literature is beginning to accumulate evidence that these well-targeted and executed campaigns can have small to moderate effects not only on health knowledge, beliefs and attitudes, but also on behaviors. Coffman¹² states that no progress has been made on innovation in campaign evaluation as funders are more focused on results.

Some reviews on evaluations of HIV prevention campaigns conducted in the first decade of the 21st century considered that HIV/Aids campaigns can have an impact on the knowledge, attitudes, and behaviors related to $\rm HIV^{13-16}$. These reviews questioned the effectiveness of the interventions due to the fact that they continue to use weak designs for evaluating results (ie, pre-experimental).



The most recent reviews continuo to show that there is a growing body of evidence on the effectiveness of social marketing and media interventions to increase condom use, knowledge related to HIV and the adherence to HIV testing. Unlike the previous ones, these studies explored the patterns in the type of study, internal validity and the effectiveness of the interventions¹⁷⁻²⁰. Likewise, they analyzed HIV/Aids prevention programs through reference criteria, in order to identify gaps between the design of the programs and their effectiveness²¹.

In Latin America were observed changing trends. In the 1980s the reign of silence prevailed or messages seemed only whispered. In the 1990s, the voices began to become louder, beginning with the use of social marketing. At the end of the 2000's, strategies became diversified and a dialogue sprang up among all actors, including the most vulnerable groups, health personnel, opinion leaders, and the general population²².

Studies aimed at evaluating the impact of campaigns are now considered essential²³. In the initial evaluations, informed condom use, reduction in the number of sexual partners, or the risk of sexually transmitted diseases were highlighted as central issues²⁴. In other evaluations, the psychological dimensions of affection, cognition and behavior were observed for better persuasiveness of the campaigns, as well as the mediating effect of the relevant sociodemographic and behavioral characteristics to adopt healthy behaviors and avoid risky behaviors^{23,25,26}.

However, despite major efforts and economic investments over the past thirty years to curb the spread of HIV, campaigns often go unevaluated²⁷, or lack rigorous evaluation¹⁴.

Based on the above considerations, it is necessary to conduct a literature review on the evaluation of HIV prevention campaigns through mass media that have been implemented in Latin America, in order to identify: if campaigns are being evaluated ^{14,27} and the methodological quality of the evaluations ¹⁷⁻²¹, the approaches and variables that are being used ^{13-16,24}, and the target audiences ^{22,23,25,26}, in a way that allows us to make a series of recommendations about the implementation and the evaluation of this type of campaigns in the region.

Materials and methods

We followed the recommendations of Souza, Silva, & Carvalho²⁸ for conducting integrative review. We searched for articles indexed in the following health and social science communication databases: Scopus, Web of Science, Science Direct, ProQuest, Google Scholar, Dialnet Plus, Redalyc Clacso and Scielo. We conducted this search in both Spanish and English, using the following search terms: "HIV/Aids and health campaigns", "Evaluation HIV/Aids campaigns", "Evaluation HIV/Aids prevention campaigns in Latin America", "Analysis of HIV/Aids prevention campaigns". Because no Portuguese keywords were used, articles with evaluations of campaigns published in this language, and probably implemented in Brazil, are not included.

This initial search yielded 246 publications that included: articles, guides or government documents, book chapters, conference, and postgraduate theses related to HIV prevention interventions in mass media implemented in Latin America. Bibliographies of these studies were also reviewed to identify relevant assessments omitted from the results of electronic



searches. This review provided four additional studies. We reviewed this initial set of documents to exclude those that did not report empirical findings of campaign evaluations; 187 documents were excluded at this stage.

To be included in the present review, documents had to meet the following criteria: a) have been published between 1990 and 2018, since the appearance of the first published document on campaign evaluation; b) present empirical findings of the evaluation of an HIV prevention campaign in mass media in Latin America or reports from the agencies that carried out the evaluations; and c) present findings regarding the impact of the intervention, including variables such as HIV knowledge, attitudes, and behaviors. According to these criteria, 51 documents were excluded.

Initially, only peer-reviewed studies were going to be included, but due to the lack of found documents, it was chosen to include institutional documents and master's degree thesis. This limitation has also been presented in studies conducted in other contexts^{14,21}.

The final set consisted of 12 documents, including: nine peer-reviewed articles, two institutional documents, and one Master's dissertation.

Although, at present, the reviews focus on the characteristics of the evaluations and their internal validity to establish effects and results¹⁷⁻²⁰, the documents found for this review do not allow for similar ways to analyze the evaluations, since there is no homogeneity in the results, designs, methods, and samples.

Subsequently, the rules for the coding of documents were defined. Each document was coded by three of the authors and in case of differences, these were discussed with the set of authors. The results of this coding were organized in two tables: one with the characteristics of the campaigns evaluated (Table 1) and another with the results of the evaluation of the campaigns (Table 2), which are presented below. In order to classify the results in the evaluation of the campaigns, we considered the most common variables in this type of intervention, which emerged in the second filtering of the documents. The first two variables refer to the process of reception of the campaigns (recall and attitude towards the campaigns) and the others to their results:

- Recall: is a measure of expresses the weight of media and the ability of creative execution to attract attention and position either a campaign in the memory of the target audience²⁹.
- Attitude towards the campaigns: degree of favorability or agreement in relation to the messages, clarity or potential results of campaigns.
- Knowledge: refers to how much the target audience knows about different aspects of a campaign. Knowledge is a significant reference for action or response to a stimulus Theory of Reasoned Action-³⁰.
- Attitudes: Coffman¹² states that attitudes are a person's affection for or against an object.
- Behaviors: for Ajzen & Fishbein³⁰, is the end result of a set of predictors in which cognitive or emotional responses are included that are expected to result in the elimination or reduction of obstacles to change.



It would have been interesting to include variables such as the use of theory to understand pathways to change, time of interventions, etc. But the information collected did not allow conclusions to be drawn on those aspects.

Results

A total of 12 documents were identified that presented 15 evaluations of HIV prevention campaigns in the mass media in several Latin American countries. About five evaluate several campaigns³¹⁻³⁵, three documents do not assess a particular campaign but rather the recall of HIV campaigns in a specific population³⁶⁻³⁸ and four evaluate a specific prevention campaign³⁹⁻⁴².

Description of the campaigns

Table 1. Characteristics of the campaigns evaluated

#	Author(s)	Country	Campaign Name	Campaign year	Medium(s)	Target audience of the evaluation	Message
1	Vernon R, Ojeda G, Murad R. ³¹	COL	PROFAMILIA campaign, slogan: "Los hombres preparados no mueren de SIDA" ("Prepared men don't die of AIDS") and "Si tienes relaciones sexuales en las próximas 24 horas, piensa en el SIDA y piensa en un condón seguro. Tahití, un condón seguro" ("If you have sex in the next 24 hours, think about AIDS and think about a safe condom. Tahiti, a safe condom").	1988	Radio	General population.	Condom use in AIDS prevention
2	Rico B, Bronfman M, Del Rio C. ³²	MEX	"Disfruta con responsabilidad" ("Enjoy responsibly"), "¿No cree que debería informarse?" ("Don't you think you should get informed?"), " y tú qué estás haciendo?" (" and what are you doing?"), "EI SIDA no es cuestión de" ("AIDS is not a matter of"), "La mujer y el SIDA' ("Women and AIDS"), "Quítate la venda de los ojos" ("Take off your blindfold").	1987 a 1994	TV, radio and poster spots	General population, at-risk groups, women and adolescents.	HIV/Aids Prevention, Openness to HIV and AIDS Communication
3	Burgos M. ³³	ARG	"AIDS Kills", "drugs are always sex with AIDS", "AIDS: don't let yourself fall in a the trap".	No information	Posters, flyers and TV spots	General population.	HIV risk behaviors
4	Roso A. ³⁴	BRAZ	"Hebe", "Eu confio" ("I trust"), "Eliakim Araújo", "Leila Cordeiro", "Galinha", "Carnaval" ("Carnival") and "Pega – Não Pega"	No information	TV Spots	Low-class women, between 18 and 51 years old.	Condom use
5	Vera-Gamboa L, Cen-Chablé M, Góngora- Bianchi RA. ³⁷	MEX	No information	No information	No information	Gay men.	Knowledge of HIV/Aids and risky sexual practices
6	Vera-Gamboa L, Cerón- Bracamonte B, Góngora- Bianchi RA. ³⁶	MEX	No information	No information	No information	Men who have sex with men.	Knowledge, attitudes, sexual practices, perception of HIV/Aids risk

Continued



#	Author(s)	Country	Campaign Name	Campaign year	Medium(s)	Target audience of the evaluation	Message
7	Porto MP. ⁴⁰	BRAZ	"Campanha de Carnaval" ("Carnival Campaign").	2003	Poster, radio and TV spots	Adolescent women between the ages of 13 and 19.	Demand condom use from sexual partners
8	Flores F, De Alba M. ³⁸	MEX	Not applicable	No information	No information	University students between the ages of 17 and 25.	Social Representation of AIDS
	Gobierno de Chile, Ministerio de Salud (Government of Chile, Ministry of Health) (undated) ³⁵		"Lo único mortal del VIH es no saber que lo tienes. Hazte el examen a tiempo" ("The only deadly thing about HIV is not knowing you have it. Take the test on time").	2003	Billboards, radio, TV spots	General, older than 15 years sexually active.	Get tested for HIV. Effective self-care when exposed to HIV risk
9		CHIL	"Frente al SIDA, yo tengo una postura" ("In the face of AIDS, I have a stance").	2005	Billboards, radio, TV spots	General, older than 15 years sexually active.	Stimulate in the population the conversation about one's own sexual experience
			"Mi vida la cuido toda la vida, siempre condón" ("My life I take care of all my life, always condom").	2006	Billboards, TV spots	Women and men between the ages of 15 and 30.	Consistent use of condoms, as a preventive measure, at all times when there is a risk of sexual transmission of HIV
			"Yo decido, me cuido siempre" ("I decide, I always take care of myself").	2007	Radio and TV spots	Adolescents and young people between the ages of 15 and 30.	Increase consistent condom use as a preventive measure
10	Ahumada M, Ruiz M, Parra V. ⁴¹	CHIL	"Hazte el examen" ("Get tested")	2011	TV spots, radio, written press and through a website.	At-risk populations (e.g., men who have sex with men, transgender people and sex workers).	Conducting an HIV test
11	Reynaga C. ⁴²	PER	"Cabeza Caliente" "Hot Head."	2008	TV spots and posters	Students in 5th year of secondary school, from 15 to 19 years old.	Condom use
12	Nielsen R, Luengo M, Mello M, Paz J, Pantin C, Erkkola T. ³⁹	BRAZ	"Zero Discrimination campaign"	2014	Social Networks	General population	Non-discrimination towards people living with HIV or AIDS

Table 1 presents the description of the 15 related campaigns in the 12 documents reviewed. The first evaluation of a campaign was found in Colombia in 1990³¹ and the most recent in Brazil in 2017³⁹.

About eight of the campaings evaluated targeted a general audience^{31,33,35,39}, six targeted adolescents and young adults^{32,34,38,40}, three were designed for women^{32,34,40}, and two were designed for at-risk groups (e.g., men who have sex with men, transgender people and sex workers)^{32,41}.

The most common message in the campaigns was the promotion of condom use $(n=6)^{31,34,35,40,42}$. Abot two focused on stimulating discussion of HIV/Aids^{33,35}, two promoted HIV testing^{32,35}, two reported on HIV behaviors, practices and risk perception^{35,41}, one focused on non-discrimination towards people living with HIV or AIDS³⁹, and one emphasized the importance of the media in the social representation of AIDS³⁸.



Description of the evaluations

Table 2. Results evaluated in the campaigns

#	Evaluation method	Sample	Type of evaluation	Results	
1	Baseline and final surveys.	General population (N= 944 baseline, and 1440 final sample).	Recall.	-HIV knowledge/belief. -Attitudes towards condom use. -Behaviors (Use and purchase of condoms).	
2	In-depth interviews.	General population (N not specified), leaders of NGO's and opinion leaders interested in the problem of AIDS (N=7).	No information	-Attitudes towards messages/campaignsBehavior/attitudes towards the demand for counseling via telephone callsBehaviors (Discussion in the social environment about prevention).	
3	Survey and interviews.	General population (N= 5,000).	Recall.	-Behaviors (Reduction in the number of sexual partners). -Behavior/attitudes towards the demand for counseling via telephone calls.	
4	Focus groups after observing 7 campaigns and individual interviews.	Two groups of women: those who participate in groups fighting HIV/Aids and those who do not participate in these activities.	Means of exhibition.	Attitudes towards messages/campaigns.	
5	Questionnaire and semi- structured interview.	MSM (N = 14).	Recall.	No information	
6	Questionnaire and semi- structured interview.	MSM (N= 50).	Recall.	No information	
7	Survey with open and closed questions.	Adolescent women aged 13-19 (N= 1,006).	-Means of exposure. -Recall.	-Attitudes towards condom use. -Behavior/attitudes towards the demand for counseling via telephone calls.	
8	Questionnaire with open and closed questions.	University students (N= 400).	Means of exhibition.	Attitudes towards messages/campaigns.	
	Telephone interviews.	Men and women aged 15-60, sexually active (N= 2,860)	Recall.	-Attitudes towards messages/campaignBehavior/attitudes towards the demand for counseling via telephone callsHIV knowledge/beliefBehavior.	
9	Telephone survey.	General population over 15 years of age sexually active (N= 1,004)	-Means of exposure. -Recall	-Attitudes towards messages/campaigns. -Behavior/attitudes towards the demand for counseling via telephone calls.	
	Telephone Interviews.	Adolescents and young people aged 15 to 30 (N=1,616).	-Recall	-Attitudes towards messages/campaignHIV knowledge/beliefBehavior/attitudes towards the demand for counseling via telephone calls.	
	Telephone interviews.	Adolescents and young people aged 15 to 30 (N=1,680).	-Means of exposure. -Recall.	-Attitudes towards messages/campaign. -Behavior/attitudes towards the demand for counseling via telephone calls.	
10	Press analysis, general population survey, semi-structured interview with people linked to health and analysis of content and discourse of the opinions of various social sectors.	General population (N=137) and key informants (N=14).	No information	-Attitudes towards messages/campaign. -Behaviors (HIV testing). -Behavior/attitudes towards the demand for counseling via telephone calls.	
11	Survey.	Secondary school students aged 15-19 (N=440).	-Means of exposure. -Recall.	No information	
12	Content analysis.	Posted tweets on HIV and AIDS and discrimination, published between January 2014 and March 2015 (N=7546).	No information	-Behavior (increased demand for HIV testing). -Behavior/attitudes towards the demand for counseling via telephone calls.	

Table 2 presents the methodological characteristics and results of the evaluations carried out on the campaigns.



The results will be presented according to the main variable evaluated, which may be: means of exposure, recall and attitude towards the campaigns, knowledge, attitude and behavior.

Means of exposure

A total of six documents agreed that television is the most effective medium: between 80% and 96% of those who remembered a campaign saw it through this medium. Radio and posters are secondary media where participants remember seeing or hearing campaign advertisements^{34,35,38,40,42}.

Recall

Most of the documents reviewed (n=9) include results related to the evaluation of campaign recall. There is a high recall of these campaigns: between 67-100% of the participants in the different studies reported having seen, heard, or read a message about HIV or AIDS in the media. There is less recall when evaluating campaigns aimed at specific segments of the population^{36,37,42}.

Recall is also lower when evaluating campaign-specific messages, themes or texts^{31,33,40}.

Attitude towards the campaign

The results in eight studies show that there is no consensus on attitudes towards messages and campaigns. In some cases, the campaigns have been criticized for using crude and direct language that generates rejection and does not help to increase risk perception or safer practices⁴¹. Other authors argue that progress in HIV prevention cannot be achieved using the same traditional approaches and that innovative campaigns are needed, even if they ruffle some feathers among the general public³².

Differences were also observed in attitudes towards campaigns, even when they are aimed at the same population group. For example, in a study with Brazilian women with similar characteristics in terms of age and stratum, it was evident that the message is received in a different way. The participants who were part of organizations that fight against HIV/Aids do not agree or identify with most of the messages, while those of the other group do (women who participate in pre-existing groups that are not directed to the prevention of HIV/Aids)³⁴.

Knowledge

Only three of the 15 evaluations show evidence of results in terms of knowledge about HIV prevention. The research of Vernon et al.³¹ in Colombia shows increases between baselines from 9 to 30% in the knowledge of condom use as a behavior to prevent HIV. Similarly, in Chile's campaigns, the majority of people (82%) believe that condoms are a good way to prevent HIV, and 97% recognize that AIDS is a disease that can affect anyone³⁵.



Attitudes

Only in two of the documents are attitudinal aspects evaluated and specifically related to condom use. Vernon et al.³¹ found an increase in the attitude towards the condom score from 4.76 in the baseline to 6.75 in the final line (p <01). Likewise, the exposure to the "Campaña del Carnaval" among adolescent women in Brazil⁴⁰ was significantly associated with more positive attitudes towards the purchase of condoms.

Behaviors

Results are reported in four behaviors: discussion on issues related to HIV and sexual and reproductive health in general, use of telephone counseling for HIV prevention, HIV testing, and condom use.

Exposure to the campaigns generally stimulated discussions in the social environment about prevention, and most respondents reported that the campaign made them rethink their position on HIV/Aids, generating reflection and a more open discussion about prevention with their partner, friends, teachers, doctors and family^{32,33,35,40}.

Regarding HIV testing, in research conducted in Chile, only 3.6% of 137 respondents said they had taken the test after seeing the campaign⁴¹.

In the evaluation of behavioral aspects, 6 studies were found where there is an increase in condom use^{31,40}, a greater demand for testing^{32,39,41}, and a reduction in the number of sexual partners³³. Although most of the campaigns included messages focused on promoting condom use, only one of the documents assessed behavioral aspects of condom use³¹.

Discussion

Low number of prevention campaigns and limited evaluation of the campaigns

The results show that there are few publications of evaluations carried out on HIV prevention campaigns in the mass media in Latin America. Chile ranks first in the number of published evaluations, where - between 2014 and 2017 - there is almost one campaign evaluation per year, and significantly higher in comparison with other countries in the region. The absence of publications can be explained by the fact that: 1) countries do not carry out the respective evaluations of the prevention campaigns that they implement either due to budgetary limitations or due to the lack of an evaluation culture, 2) there are few published and easily accessible evaluations, 3) in recent years HIV prevention has not necessarily prioritized these type of campaigns.

In the first case, it is clear that despite the importance and usefulness that literature confers on measuring the results and incidence of HIV prevention campaigns^{5,23}, this awareness has barely been assumed by governments and institutions working on this issue in the region. Likewise, there are not always sufficient resources to cover the costs of evaluations when working with limited prevention budgets.



In the second case, many times the same institutions or entities contracted by sponsors of the programs do the same, more for administrative than academic purposes, which, added to a disarticulation of the academy with these processes, does not allow its scientific validation. The existence of evaluations by the institutions that implement the campaigns in this region is valid. Although not studied by the academy, these initiatives demonstrate that the significance of evaluating the prevention campaigns is not being overlooked. Therefore, in the absence of academic evidence, the inclusion and analysis of these technical management documents becomes relevant when making integrative reviews that allow an approach to these processes.

In the third case, it is observed that in recent years there has been an awareness that the epidemic is concentrated in at-risk populations, and usually prevention messages aimed at these populations use other types of strategies through channels other than the mass media. However, limiting the number of published assessments is a global problem ^{13,21}.

Moving from general audiences to targeted audiences

Most of the strategies evaluated in this review are designed for the general population and not for specific groups at risk. In fact, campaigns that attempt to develop messages based on the needs of these populations are criticized because they are not within the moral and prevention standards that have been traditionally handled in Latin countries³⁶.

Only the most recent campaigns are beginning to take into account the issue of high risk in targeted populations, as in the case of the "*Hazte el examen*" campaign in Chile in 2011⁴¹. This result coincides with the review carried out by Noar, et al.¹⁵ on HIV/Aids mass communication campaigns, considering that the campaigns reviewed between 1998 and 2007 have increasingly employed the strategy of using defined and specific audiences through audience segmentation procedures.

From moral speeches to speeches on rights

The campaigns analyzed clearly were slow at first in succeeding to transmit their intended messages, going from preventive behavior messages in the first campaigns of the 80s and 90s³¹⁻³⁴, to content with a human rights perspective in more recent years^{35,39-42}. In fact, Ahumada et al.⁴¹ consider that all the prevention campaigns carried out in Chile prior to the year 2010 maintained strong prevention content, in some cases moralistic, understood as the modification of personal behaviors that incorporated abstinence from penetrative sexual activity, keeping monogamous and faithful couples, as well as the consistent and correct use of condoms.

Since the mid-1990s, there have been major criticisms in this regard. Burgos³³ considered that prevention was possible, as long as both the pleasure and the social forms acquired were respected. It recognized, however, that most AIDS campaigns fell back on "moralizing" messages aimed at populations with homogeneous customs.



Recall and attitudes towards the messages: there is no identification and representation in the contents

Audience recall was high on most assessments^{35,37,42}. However, in some cases respondents reported low recall of the campaign and specific themes or texts^{31,33,35-37,40,42}. In this case, it is noteworthy that the campaigns aimed at specific audiences or in which specific audiences were evaluated are those with the least recall. It would be necessary to ask about the form of delivery of the messages or the individualization with respect to its punctual necessities.

A little more than half of the documents show evidence of results in terms of attitudes towards the messages and the campaigns carried out^{32,34,35,38,41}. On the one hand, campaigns have been criticized for using uncensored language, which generates rejection⁴¹, and on the other, it is considered necessary to use questioning messages to generate change³².

Exposure to the media. TV is the most effective medium

One of the results most reported by the evaluations conducted in Latin America is the coverage of the campaigns implemented.

Several analyzed evaluations conclude the importance of television as one of the priority sources of transmission of information related to HIV/Aids^{40,42}, which is corroborated by Vidanapathirana et al.¹³, who concluded that mass media interventions for the promotion of HIV testing showed an immediate and global effect, but no long-term effects were observed.

From evaluating knowledge and attitudes to evaluating behaviors

While most of the publications reviewed have focused on assessing campaign recall and messages, there is also a latent interest in assessing the impact of campaigns on knowledge and behaviors related to HIV prevention. Despite the fact that only 3 of the 15 evaluations reviewed show evidence of results in terms of knowledge about HIV^{31,35}, in general, it is observed that knowledge of condom use as a means of preventing HIV increased.

Nonetheless, two articles describe the evaluation of attitude towards condom use, with positive results in both cases 31,40 .

With regard to behavioral assessments, campaigns are associated with an increase in condom use^{31,35} and HIV testing^{39,41}. They also encourage the use of telephone counseling services for HIV prevention³² and to talk to those in their social circle about HIV prevention and about sexual and reproductive health issues, in general^{35,40}. The fact that the majority of these campaigns are directed to the general public and not specific populations such as risk groups -men who have sex with men, expectant mothers, drug addicts, etc.-, could explain why they do not address preventive messages from other forms of infection such as the exchange of syringes, among others.



Methodological limitations of evaluations

Regarding the evaluation methods of the campaigns, it can be observed that very basic methods were used and only one evaluation carried out pre- and post-evaluation³¹. In addition, only half of the evaluations used large sample sizes, and most used general population samples. This picture is in line with UNAIDS² assertion that, in the first decade of the 21st century, socio-behavioral HIV prevention programs lacked rigorous evaluation - on an appropriate scale - for widespread implementation¹⁵.

Conclusions

This review contributes to an understanding of the status of the evaluation of mass media campaigns focusing on HIV prevention in Latin America. First, there is a shift from general-public campaigns to a focus on specific audiences, although there is still a major challenge in addressing the information needs of groups considered to be at risk. Second, there has been a slow shift away from moralist messages, and human rights discourses have started to emerge as guiding frameworks in the campaigning of HIV prevention. Third, in terms of the results of the campaigns evaluated, researchers have focused on campaign recall, messages and media exposure. Although knowledge, attitudes and behaviors have been included since the first evaluations in the 1990s, the emphasis has been placed on the evaluation of knowledge and attitudes. However, it is clear that behaviors are increasingly assessed.

In terms of limitations, it is observed that very few articles published report results on HIV prevention campaigns in mass media in Latin America. This limited the analysis by the different types of documents analyzed, which is a major challenge, both for the executing institutions and for the academy. It is essential to generate alliances that allow for the design of studies with more sophisticated methodologies and with external evaluations, whose reports can be subjected to peer review that can be published. In this way, there would be references for greater rigor and strength, from the planning itself to the evaluation of the campaigns, based on the evidence.

For future research in the field, it is advisable to carry out a review that includes not only evaluation documents of mass media campaigns, but also interventions based on other communication strategies, other than social marketing, in order to differentiate between them. On the other hand, we also recommend that is necessary to promote alliances with leadership from the academy, seeking the access to support resources from the science and technology institutions, which allow the development of the external evaluations of this type of campaigns implemented by the government and non-governmental institutions, with the purpose that these evaluations can be subject to an external peer of revision.



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Authors contributions

All authors actively participated in all stages of the preparation of the manuscript.

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Foi feita uma revisão integrativa da literatura dos últimos trinta anos sobre avaliações de estratégias de prevenção ao HIV implementadas nos meios de comunicação de massa na América Latina. Foram identificados 246 documentos, dos quais 12 atenderam aos criterios de seleção e 15 avaliações de campanhas foram identificadas. Os resultados indicam que a mensagem mais usada foi promover o uso de preservativos. A maioria das avaliações focou em lembrar a mensagem das campanhas. Apenas três apresentam resultados de avaliações do conhecimento e outros dois sobre a atitude em relação ao uso de preservativos. Cerca de nove relataram mudanças comportamentais. Concluindo, existem poucos artigos com resultados de avaliação desse tipo de campanhas. A avaliação comportamental é cada vez mais levada em consideração. Desenhos de avaliação pré-experimental com uma única medida pós-teste e sem um grupo controle são utilizados.

Palavras-chave: Campanhas. Prevenção ao HIV/Aids. Mercados sociais. Comunicação em saúde. América Latina.

Se realizó una revisión integradora de la literatura de los últimos treinta años sobre las evaluaciones de las estrategias de prevención del VIH implementadas en los medios de comunicación masiva en América Latina. Se identificaron 246 documentos, de los cuales 12 cumplieron los criterios de selección, y se identificaron 15 evaluaciones de campañas. Los resultados indican que el mensaje más utilizado era promover el uso del condón. La mayoría de las evaluaciones se centraban en recordar el mensaje de las campañas. Solo tres arrojan resultados de evaluaciones de conocimientos y otras dos sobre la actitud frente al uso del condón. Acerca de nueve cambios de comportamiento. En conclusión, existen pocos artículos con resultados de evaluación de este tipo de campañas. Se utilizan diseños de evaluación pre-experimentales con una única medida pos-test y sin grupo control.

Palabras clave: Campañas. Prevención de VIH/SIDA. Mercadeo social. Comunicación en salud. América Latina.

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