PSICOLOGIA EM ESTUDO

ARTICLE 10.4025/psicolestud.v24i0.44393

BRIEF INTERVENTIONS FOR SUBSTANCE ABUSE IN LATIN AMERICA: A SYSTEMATIC REVIEW

Telmo Mota Ronzani [1 2], Orcid: http://orcid.org/0000-0002-8927-5793
Cristina Fuentes-Mejía [3], Orcid: http://orcid.org/0000-0001-7501-4341
Daniela Cristina Belchior Mota [1], Orcid: http://orcid.org/0000-0002-3757-605X
Henrique Pinto Gomide [4], Orcid: http://orcid.org/0000-0001-7050-3971
Maira Leon Ferreira [1], Orcid: http://orcid.org/0000-0002-7400-304X
Erica Cruvinel [1], Orcid: http://orcid.org/0000-0003-2778-3693

ABSTRACT. This study aimed to assess the literature for brief interventions in Latin America. Methods: We searched articles that were published between 2005 and 2016. Results: After removing duplicates and applying exclusion criteria, 29 studies were evaluated. The number of sessions, length, and definition of brief intervention varied across studies as well as the instruments used to assess substance use and participant characteristics. Conclusions: Even though brief interventions are adopted in many countries in Latin America, research was conducted only in 5 countries. In these countries, there was great heterogeneity on research methods, instruments and the type of brief intervention.

Keywords: Brief intervention; psychoactive substances; substance abuse.

INTERVENCIONES BREVES PARA EL ABUSO DE SUSTANCIAS EN AMÉRICA LATINA: UNA REVISIÓN SISTEMÁTICA

RESUMEN. El objetivo del presente estudio consistió en evaluar la literatura sobre Intervenciones Breves (IBs) en América Latina. Métodos: se realizó una búsqueda en nueve bases de datos acerca de estudios empíricos publicados en el periodo de 2005 a 2016. Resultados: luego de eliminar los duplicados y aplicar criterios de exclusión, 29 estudios fueron evaluados. El número de sesiones, la duración, la definición de IB, los instrumentos para evaluar el uso de sustancias y las características de los participantes variaron en cada estudio. Conclusiones: Aunque se han adoptado IBs en varios países de Latinoamérica, esta investigación encontró estudios únicamente de cinco países, caracterizados por una gran heterogeneidad en métodos de investigación, instrumentos y tipos de IBs.

Palabras clave: Intervención breve; sustancias psicoactivas; abuso de sustancias.

[1] Universidade Federal de Juiz de Fora (UFJF), Juiz de Fora-MG, Brazil.
[2] E-mail: tm.ronzani@gmail.com
[3] Universidad Minuto de Dios-Bogotá, Colombia.
[4] Universidade Federal de Viçosa (UFV), Viçosa-MG, Brazil.

INTERVENÇÕES BREVES PARA O ABUSO DE SUBSTÂNCIAS NA AMÉRICA LATINA: UMA REVISÃO SISTEMÁTICA

RESUMO. Este estudo teve como objetivo avaliar a literatura para intervenções breves na América Latina. Métodos: Foram pesquisados artigos publicados entre 2005 e 2016. Resultados: Após a remoção de duplicatas e aplicação dos critérios de exclusão, foram selecionados 29 estudos. O número de sessões, duração e definição de intervenção breve variou entre os estudos, bem como os instrumentos utilizados para avaliar o uso de substâncias e características dos participantes. Conclusões: Embora intervenções breves sejam adotadas em muitos países da América Latina, a pesquisa foi realizada apenas em cinco países. Nesses países, foi observada uma grande heterogeneidade nos métodos de pesquisa, nos instrumentos e no tipo de intervenção breve.

Palavras-chave: Intervenção breve; substâncias psicoativas; abuso de substâncias.

Introduction

Studies indicate that alcohol and drug abuse have brought disorders on a proportion of Latin America's population. In Brazil, Andrade et al. (2012) has shown that in the last 12 months, 3.6% of the total population older than 18 presented disorders caused by alcohol and drug abuse. This percentage drops to 2.8% in Colombia (Demyttenaere, Bruffaerts, Posada-Villa, Gasquet, & Kovess, 2004), 2.5% in Mexico (Medina-Mora et al., 2005), and 1.7% in Peru (Piazza & Fiestas, 2014).

There are many risks and consequences to alcohol and drug abuse. There is also an elevated amount of aggravating factors caused by the use of such substances (Babor et al., 2007). Among drug users, there are those who can benefit from short-duration interventions in order to prevent issues and consumption-related complications (Humeniuk & Poznyak, 2004). Specialized long-term care is necessary for the most severe cases in which substance abuse becomes a chronic and long-lasting condition. Such cases are also generally associated with the development of other health conditions. (Angst, Sellaro, & Merikangas, 2002).

The early identification of damages and disorders caused by alcohol and drug abuse is fundamental in order to prevent social and health-related consequences that could have an impact on the population in general (Humeniuk & Poznyak, 2004). Detecting a pattern related to the use of psychoactive substances can help health professionals increase the level of assistance they can deliver at any primary health center (PHC). In addition, early detection can clear any doubts regarding specific treatment (Kohn, Saxena, Levav, & Saraceno, 2004). Pattern detection within a PHC context can be useful to refer high-dependency cases for treatment at a more specialized service (World Health Organization [WHO], 2010).

Detection is closely related to the brief intervention (BI), a primary and secondary prevention strategy to avoid the risks and damages associated with alcohol and drug abuse (WHO, 2010). As a prevention strategy, the aim of a BI is to identify current and potential problems caused by or linked to such substances, and to motivate users with a high-risk of dependency to change their consumption behavior. Generally, within a PHC, a BI carries a prompt evaluation of the substance use pattern, followed by a brief intervention (15 to 30 minutes long), during three or four sessions maximum (WHO, 2010).

Several meta-analyses show that BIs with alcohol consumers ata PHC contribute to a significant decrease in alcohol consumption (Bertholet, Daeppen, Wietlisbach, Fleming, & Burnand, 2005; Kaner et al., 2009), with a sustained impact for up to a year after the BI sessions. However, other studies show evidence that the effectiveness of BIs are limited for heavy alcohol and substance consumers. Is it therefore necessary to implement more adequate strategies for these users' care (Saitz, 2010). An experimental study led by Saitz et al. (2014) concluded that the Brief Negotiated Interview (BNI) method, as well as an adaptation of the motivational interview are not an effective way of decreasing illicit drugs' use on adult patients within a PHC.

Even though a BI can be performed in several contexts and is possibly an effective preventive strategy to help decrease alcohol and drug abuse, more studies are needed to evaluate its impact (Saitz, 2010; Saitz, 2014; McCambridge & Saitz, 2017). Studies about the effectiveness of the different types of BIs are made with heterogenic methodologies (Bertholet et al., 2005; Kaner et al., 2009; Saitz, 2010; Saitz, 2014). There is a fundamental need to collect more data in order to understand which types of BIs are effective, to what types of populations and in which contexts and/or circumstances. It is also important to understand the relevance of evidence on the effectiveness of BI techniques in Latin America, since this region is affected by strong conditions of socioeconomic inequality and is characterized as an example of a bigger social complexity than the developed countries where most of the BI studies take place. Therefore, this study's[5] main aim was to conduct a systematic revision of the specialized literature related to the evidence showing the effectiveness of the BI techniques in helping people with alcohol-consumption problems, as well as tobacco and other drugs in Latin American countries.

Materials and Methods

The systematic revision was directed following the steps of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Liberati et al., 2009). Research was conducted in October 2016. Previous studies from 2005 were also included in the research. The following databases were consulted: Embase, PubMed, PsycINFO, Redalyc, Scielo, Fuente Académica, Medic Latina, Lilacs and Academic Search Premier using the following keywords and expressions: 'BI', 'Early intervention', 'Brief Counseling', 'Substance', 'Alcohol', 'Marijuana', 'Tobacco', 'Cocaine', 'Crack Cocaine', 'Street Drugs'. The following keywords and expressions were used in English, Spanish and Portuguese in the Scielodatabase: 'BI', 'Intervención Breve', 'Intervenção Breve'. Theterminology was based on the Mesh Terms criteria. Other terms, such as 'Brief Psychotherapy', 'Brief Counseling', 'Early intervention and substance abuse', 'Sustancias e Intervención Breve' 'Psicoterapia breve y Drogas', 'Psicoterapia breve y alcohol', 'Psicoterapia breve y sustancias', 'Consejo Breve' were also added to the search criteria.

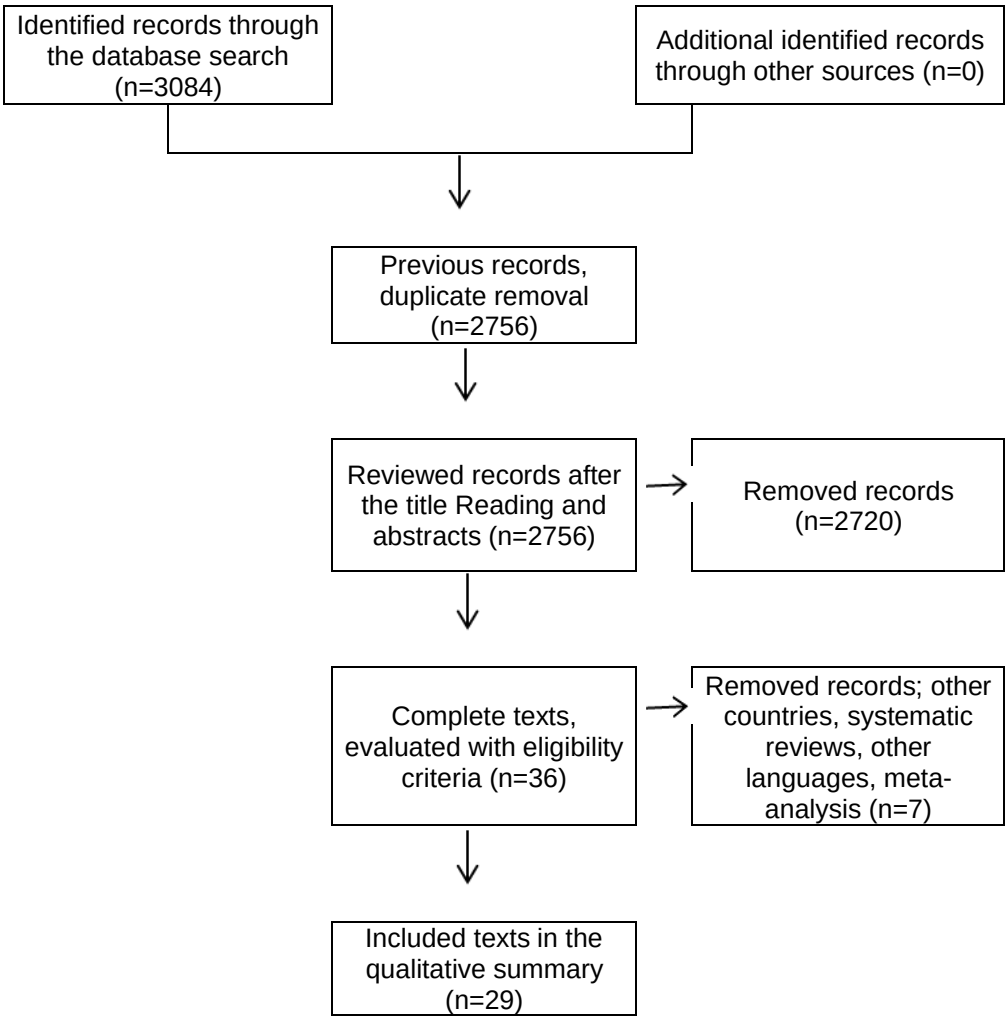
Keywords and expressions were adapted from a Cochrane BI review (Kaner et al., 2013). A dictionary of terms (i.e: Mesh Terms) was used when necessary. Meta-analyses and automatic reviews were excluded. Empiric studies, conducted over a specific BI

[5] This article presents itself as a derivate of a consultancy process called: Early Detection and Brief Intervention on risks linked to psychoactive substance abuse, based on the analysis and characterization of the existent programs in Latin America. This consultancy was led from 2016 to 2017 and had its own scientific research strategies. This consultancy was led in partnership with the Center for Research, Intervention and Evaluation on Alcohol and Other Drugs (CREPEIA), belonging to the Psychology graduate program and the Department of Collective Health of the Federal University of Juiz de Fora (UFJF – Brazil), and with the Inter-American Drug Abuse Control Commission (CICAD) / Organization of American States (OEA). Therefore, the consultancy had the financial support of both the CICAD and the OEA.

investigation in Latin American countries, were included. Articles and research that were written in Spanish and Portuguese were included in this study. Initially, the investigators read the studies' main titles to select and exclude studies; the abstracts were read afterwards. Lastly, articles following all inclusion criteria were separately evaluated by three investigators.

During the articles' qualitative analysis, in order to agree on subsequently collected definitions and information, results were initially explored with the presence of a fourth evaluator. During this step, the initially created spreadsheet was slightly changed, and some standardization criteria were established following the specified information on charts 1, 2 and 3. Following the changes, evaluators performed a second analysis of the articles, in order to compare information to the previously established criteria. Afterwards, the articles were shared among three of the investigators to allow data to be corroborated. Each investigator reviewed a collection of around ten articles, previously categorized by one of their fellow evaluators. A last meeting was organized with a fourth evaluator to clarify any remaining doubts. The entire research, selection and article analysis process is described in figure 1.

Figure 1. PRISMA flow chart. Identification and selection procedures for the studies included in the systematic review.



Source: The authors.

Results

Table 1 presents the main descriptive research data. Among all the countries included in this analysis, Brazil (55.1%) and Mexico (31.0%) are highlighted. Most of the articles were published in Spanish (41.3%) and Portuguese (27.6%). Research was mostly conducted regarding teenager intervention (31.0%) and implemented by health professionals (27.6%). Studies give priority to BIs oriented towards alcohol-consumption reduction (68.9%). Six articles addressed alcohol and other drugs (20.7%), two addressed tobacco (6.9%) and only one was oriented towards crack (3.4%). Twenty studies (68.9%) used a quantitative methodology, five used a qualitative methodology (17.2%) and four used both methodologies (13.7%). Studies on outcome valuations were the most performed (58.6%), followed by process evaluations studies (20.7%), descriptive analysis (10.3%) and other studies including correlational evaluations (10.3%). Among the 17 studies about results' evaluations, eight of them (47.0%) purposely evaluated the BI's effectiveness, using experimental designs (75.0%) and quasi-experimental designs (25.0%). Of this sample, nine studies (52.9%) used control groups in the methodology, and two of them (11.7%) used an active control group (Brief Counselling and Brochure). Nine studies (52.9%) were classified under the 'others' category and used non-experimental designs to evaluate all interventions' results (qualitative, longitudinal, pre and post-control designs). Studies which evaluated the training impacts on the BIs' application were also found.

Table 2 highlights the detection tool used during the studies. The most used early-detection tools were the Alcohol Use Disorders Identification Test (AUDIT) (22.9%), the Retrospective Baseline (LIBARE) (17.1%) and the Problem Oriented Screening Instrument for Teenagers (POSIT) (11.4%). The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) was only used by three studies (8.6%) and the CAGE questionnaire by two (5.7%). Among the twenty-three studies using tracking tools for drug use, thirteen of them (56.5%) declared the validity of the tool for the studied population, as well as for the population of the country where the research had been led.

Table 1. Detection and BIs' strategies profile in Latin America (N=29)

Variable	Number of studies (N/%)
Country	
Brazil	16 (55.1%)
Mexico	9 (31.0%)
Colombia	2 (6.8%)
Peru	1 (3.4%)
Venezuela	1 (3.4%)
TargetPublic (n/%)	
Teenagers	9 (31.0%)
Health Professionals	8 (27.6%)
College and University Students	4 (13.8%)
Others	8 (27.6%)
Intervened Substances (n/%)	
Alcohol	20 (68.9%)
Alcohol and Other Drugs	6 (20.7%)
Tobacco	2 (6.9%)
Crack	1 (3.4%)
Type of Study	
OutcomeEvaluation	17 (58.6%)
Effectiveness Study of BI	8 (47.0%)
Experimental Studies	6 (75.0%)
Almost Experimental	2 (25.0%)
Others (training effectiveness, qualitative, longitudinal, pre/post control-less)	9 (52.9%)
Process Evaluation	6 (20.7%)
Descriptive	3 (10.3%)
Others	3 (10.3%)

Source: The authors.

Table 2. Used Detection Tools (N = 35)

Tool	Number of studies (N/%)
AUDIT	8 (22,9%)
LIBARE	6 (17,1%)
POSIT	4 (11,4%)
ASSIST	3 (8,6%)
CAGE	2 (5,7%)
RAPI	2 (5,7%)
Interview based on the *Diagnostic and Statistical Manual of Mental Disorders*	2 (5,7%)
Others	8 (22,8%)

Source: The authors.

Table 3 presents general characteristics of the documents: authors, country where the study was done, publication year, sample, objective and main found results. In order to have a better visualization of the results, the authors organized the articles into five different categories of analysis. These categories were based on each study design: 'Results Evaluation – Effectiveness' studies (N=8), 'Results Evaluations – Others' (N=9), 'Process Evaluation' (N=6) 'Descriptive' (N=3) and 'Others' (N=3).

Table 3 - Summary of the 29 articles included in the analysis

Category	Authors	Country	Year	Sample	Objective	Aimed Public	Results
Results Evaluation – Effectiveness	Oliveira et al. (2015)	Brazil	2015	458	Compare presential BI *versus* online BI *versus* Control	College and University students	Presential BI = Online BI > Control
	Silva e Tucci (2015)	Brazil	2015	32	Evaluate BI *versus* Control	College and University students	BI = Control.
	Signor et al. (2013)	Brazil	2013	637	Evaluate BI *versus* Educative Folder	Internet services users	BI > Educative Folder
	Flórez-Alarcón e Castellanos-Morales (2012)	Colombia	2012	66	Evaluate Motivational Interview *versus* Control	Teenagers	Motivational Interview > Control.
	Segatto, Andreoni,	Brazil	2011	175	Evaluate ME *versus*	Teenagers	ME = Educational Brochure

	Souza e Silva, Diehl e Pinsky (2011)				Educational Brochure		
	Martínez, Meléndez e Trejo, (2012)	Mexico	2010	120	Evaluate BI *versus* Brief Counseling	Teenagers	BI = Brief Counseling > Control
	Garcia, Ruiz, Martínez e Cabrera (2011)	Mexico	2010	23	Evaluate IB *versus* Brief Counseling	Teenagers	BI = Brief Counseling.
	Martínez et al. (2008a)	Mexico	2008	40	Evaluate Motivational Brief Counseling *versus* Control	Teenagers	Brief Counseling > Control.
	Anthony et al. (2016)	Mexico	2016	2280	Evaluate Community Intervention *versus* Control	Community	Community Intervention > Control
	Oliveira et al. (2015)	Brazil	2015	507	Evaluate BI on trauma victims	Hospitalized patients	Alcohol consumption decrease
	Junqueira, Rassool, Santos e Pillon (2015)	Brazil	2015	120	Evaluate a change of attitude on students after the training	College and University students	Training was effective
	Martínez et al. (2012)	Mexico	2012	70	Evaluate BI *versus* Brief Counseling	Teenagers	BI = Brief Counseling.
	Martínez, Icaza, Elena e Berenzon (2010a)	Mexico	2010	49	Adapt a BI brochure for implementation	Employees	The BI-based brochure was considered easy to read and implement
Results Evaluation – Others	Salazar, Martínez e Barrientos (2009)	Mexico	2009	28	Evaluate if a BI session induces treatment	Teenagers	BI is effective for treatment induction.
	Flores-Alarcón e Gantiva (2009)	Colombia	2009	180	Evaluate Individual Motivational Therapy *versus* Group Motivational Therapy *versus* Control	College and University students	Individual Motivational Therapy = Group Motivational Therapy > Control.
	Castro e Laranjeira (2009)	Brazil	2009	71	Evaluate the effect of naltrexone mutually implemented with the BI	Community	Naltrexone was not effective on decreasing alcohol consumption
	Martínez, Salazar, Pedroza,	Mexico	2008	25	Evaluate BI alcohol and other drug users	Teenagers	The BI reduced alcohol and marijuana use

	Ruiz e Ayala (2008b)						
	Hoffman et al. (2016)	Peru	2016	51	Evaluate viability on implementing the BI	Health Professionals	Little viability on the BI's implementation
	Moretti-Pires e Corradi-Webster (2011)	Brazil	2011	136	Evaluate implementing the BI on primary health care	Health Professionals	The implementation process of the BI was well accepted
	Ronzani et al. (2009)	Brazil	2009	113	Evaluate the effectiveness of the BI's implementation	Health Professionals	Little viability on the BI's implementation
Process Evaluation	Furtado, Corradi-Webster e Laprega (2008)	Brazil	2008	772	Evaluate the *PAI- PAD* training on the change of belief of Health Professionals	Health Professionals	PAI- PAD training was effective.
	Ronzani, Rodrigues, Batista, Lourenço e Formigoni (2007)	Brazil	2007	303	Evaluate the BI's implementation on the work environment	Employees	Effectiveness on the BI's implementation
	Ronzani et al. (2005)	Brazil	2005	45	Evaluate implementing the BI on primary health care	Health Professionals	Viability problems when implementing the BI
	Abreu, Parreira, Souza e Barroso (2016)	Brazil	2016	1489	Analyze the consumption profile of psychoactive substances	Health Professionals	There is a link between alcohol consumption and sociodemographic variants.
Descriptive	Bisch et al. (2011)	Brazil	2011	40	Evaluate the BI's use in a Telephonic Advice service	Teenagers	BI + Telephonic Advice = crack use decrease
	Jurado, Solaeche, Lugo, Montes e Quijada (2011)	Venezuela	2011	102	Identify intervention strategies with alcohol consumers	Hospitalized patients	Diagnosis and interventions' frequency on users were low in comparison to the alcohol consumption
	Cruvinel et al. (2013)	Brazil	2013	149	Evaluate the association between Organizational Climate and BI activities	Health Professionals	A positive climate increases performance on both tracing and the BI
Others	Cruvinel e Ronzani (2011)	Brazil	2011	97	Evaluate the association between Organizational Climate and BI implementation	Health Professionals	Positive correlation between organizational climate and BI implementation

Lira-Mandujano et al. (2009)	Mexico	2009	10	Evaluate a BI program for smokers	Community	Treatment has shown itself effective

Obs: BI = BI; MI = Motivational Interview; CBT = Cognitive Behavioral Therapy; PAI-PAD = Program of Integrated Actions for Prevention and Attention on Alcohol and Drugs Use in the Community

Source: The authors.

All eight effectiveness studies were aimed to compare the BI or the motivational interview to an active control group (Brief Counselling and Brochure) or to intervention-less groups. All articles of this category presented positive results when it came to alcohol consumption decrease among participants. Four studies (50%) showed no statistic differences comparing BI to the control group, indicating that both the educational brochure and the brief counselling can also help decrease alcohol consumption.

Nine articles were classified under the 'Results Evaluations – Others' category. These studies' purpose was to evaluate several interventions to decrease drug use. Moreover, diverse methodologies were used such as longitudinal studies, pre and post-test studies with no group control, and qualitative studies. Eight articles (88.9%) presented positive results in accordance to their research objectives, whereas only one study (11.1%), which evaluated the effectivity of naltrexone used along with the BI found no positive results on alcohol consumption decrease.

The purpose of all studies classified under the 'Process Evaluation' category was to evaluate the viability of the BI's implementation on several different contexts. Among all six studies of this category, three (50%) showed difficulties on the BI's implementation, the above mentioned being held in hospitals and in patients suffering from the Human Immunodeficiency Virus (HIV) (16.6%) and in primary health care centers (33.3%). Two studies (33.3%) showed viability for the BI's application, one of them (16.6%) being held in a PHC and the other one (16.6%) in the working context of a fire station. Another study (16.6%) looked to evaluate the training process for health professionals in order to implement the BI. Positive post-training results were found.

Three articles of the descriptive studies category were found that did not mention the results' evaluation or process evaluation. The purpose of one of these articles (33.3%) was to describe the average psychoactive substance-consuming profile of individuals having received a BI. Another article (33.3%) described the BI's phone evaluation of crack users. Another (33.3%) identified the diagnosis-giving process and BI for alcohol-consumers. Three studies were classified under the 'Others' category, which analyzed other success indicators for the BI's application.

Discussion

With the purpose of characterizing Latin America's bibliographic production regarding BIs, twenty-nine articles following the search and analysis criteria were identified. Overall, most of the studies were led in Brazil and Mexico, the main target was teenagers, and alcohol was the substance most addressed. Results indicate heterogeneity coming from the definition of 'BI' and the studies' design and the measurement tools. Recent discussions suggest that BIs should be redefined as a new guiding principle: they must be performed following the aim of helping people avoid or decrease negative consequences of consuming,

and not simply by following a definition based in content, time and/or number of sessions (McCambridge, 2013; McCambridge & Saitz, 2017).

Studies also show heterogeneity regarding methodological aspects. This makes it difficult to provide solid evidence of the efficacy and effectiveness of the BI in Latin America. When compared to studies about BI in other international scenarios, the previous statement is divergent because in such countries, there is an ensemble of more solid evidence and a constant discussion about the effectiveness of the BI in different places (McCambridge & Saitz, 2017). The systematic review published by O'Donnell et al. (2013) highlights the effectiveness of the BI's techniques to help reduce problems related to alcohol consumption. However, in order to help effects to be preserved on a long-term basis, authors indicate that there is still a need to determine the ideal length, the frequency and the contents of the BI even in developed countries.

Studies evaluating efficacy and effectiveness of the BI techniques showed mostly positive results (Oliveira & Boerngen-Lacerda, 2015; Signor et al., 2013; Flórez-Alarcón & Castellanos-Morales, 2012; Martínez, Pedroza, Salazar, & Vacio, 2010; Martínez, Pedroza, Vacío, Jiménez, & Salazar, 2008a). Even though the experimental design was adopted during some studies, information regarding the procedures used is generally left out. Studies show very little attachment to the Consolidated Standards of Reporting Trials (CONSORT) criteria, used to direct the research report and to avoid interpretation bias (Moher, Schulz, Altman, & Consort Group, 2001). Some important information was left out from several articles, such as the description of the sample calculation, allocation concealment and procedures to handle incomplete outcome data.

On top of the previous facts, identified studies had no previously registered research protocols (i.e. clinicaltrials.gov), which made it difficult to investigate any publication bias. This aspect leads to the conclusion that studies with negative results have less chances of being published. However, analyzed studies use self-narrative to evaluate substance-consumption decrease. Some authors suggest that the effects of the interventions can be linked to the bias of social desirability (McCambridge & Saitz, 201717).

The fact that articles which are included in the effectiveness category don't directly quote the limitations of the BI's application should be highlighted. Even when positive results have been observed during the intervention, according to clinical studies, these results have to be constantly questioned regarding their ecological viability, in order to broadcast the results (McCambridge & Saitz, 2017). However, articles included in the current study did not examine further the discussion about the efficacy-effectiveness of the BI.

Articles under the 'Process Evaluation' category point out difficulties during the BI's implementation within different contexts. These studies mention the limitations when broadcasting the activities on primary health centers and hospitals. Research within this category also related the specificities of implementing a BI in Latin America, highlighting limitations such as: lack of knowledge regarding substance consumption, time and space difficulties, work overload of the health professionals, need of training, amongst others. In a general way, articles describe the need to consider the values' context, attitudes and social norms relative to the substance use by the relevant population, as well as the relationship between technicians and health professionals (Hoffman et al., 2016; Ronzani, Mota, & Souza, 2009; Ronzani, Ribeiro, Amaral, & Formigoni, 2005).

Some limitations can be distinguished among the conclusions of the current systematic review. The first one is that only scientific articles coming from databases presenting rigorous indexation criteria (i.e. peer reviewed journals)were included in this study.Reports that were published in other sources were therefore excluded from this

review. A second limitation was the impossibility to perform bias analysis of the studies, according to the criteria established by the PRISMA Protocol (Liberati et al., 2009). The last one is the limited number of effectiveness research found in this study and the heterogeneity of these studies.

This review reveals important information regarding the evidence of the BI's techniques, used to prevent and detect alcohol and drug consumption in Latin America. It is also the first systematic review that addresses BI in Latin American. The main results put into evidence a study concentration on the topic in two countries: Brazil and Mexico. A high number of studies were focused on alcohol and mostly targeting teenagers. There were also studies of effectiveness with a small number of participants. A great heterogeneity on the theorical and methodological approaches also needs to be highlighted. These results show the need of attention from the researchers to describe which type of BI is being evaluated, to use guidelines to publish randomized studies (i.e. CONSORT) and to register the research protocols before publishing the research outcomes. Other areas need clearer evidence, especially regarding the effectiveness of BIs for psychoactive substances.

Final considerations

The present study looked to evaluate literature about the brief interventions (BIs) oriented towards alcohol, tobacco and drug consumers in Latin America. The study concludes that even when several BIs were used in the region, there was a predominance of these interventions in five countries, which shows no homogeneity in their methods, their definition and in the detection tools that were used.

The results are important to highlight the needs and problems regarding the detection and BI in Latin America, which will be fundamental to design public policies on psychoactive substances' consumption. Besides, these results present a perspective for the academic community of an under-investigated area that need further scientific evidence.

References

Abreu, A. M. M., Parreira, P. M. S. D., Souza, M. H. D. N., & Barroso, T. M. M. D. D. (2016). Profile of comsumption of psychoatctive substances and its relationship to sociodemographic chracteristics: a contribution to a Brief Intervention in Primary Health Care. *Texto & Contexto-Enfermagem*, *25*(4), 1-9.

Andrade, L. H., Wang, Y. P., Andreoni, S., Silveira, C. M., Alexandrino-Silva, C., Siu, E. R., & Viana, M. C. (2012). Mental disorders in megacities: findings from the Sao Paulo megacity mental health survey, Brazil. *PloS one*, *7*(2), e31879.

Angst, J., Sellaro, R., & Merikangas, K. R. (2002). Multimorbidity of psychiatric disorders as an indicator of clinical severity. *European Archives of Psychiatry and Clinical Neuroscience*, *252*(4), 147-154.

Anthony, D., Dyson, P. A., Lv, J., Thankappan, K. R., Champgane, B., & Matthews, D. R. (2016). Community Interventions for Health can support clinicians in advising patients to reduce tobacco use, improve dietary intake and increase physical activity. *Journal of clinical nursing*, *25*(21-22), 3167-3175.

Babor, T. F., McRee, B. G., Kassebaum, P. A., Grimaldi, P. L., Ahmed, K., & Bray, J. (2007). Screening, Brief Intervention, and Referral to Treatment (SBIRT) toward a public health approach to the management of substance abuse. *Substance abuse*, *28*(3), 7-30.

Bertholet, N., Daeppen, J. B., Wietlisbach, V., Fleming, M., & Burnand, B. (2005). Reduction of alcohol consumption by brief alcohol intervention in primary care: systematic review and meta-analysis. *Archives of internal medicine*, *165*(9), 986-995.

Bisch, N. K., Benchaya, M. C., Signor, L., Moleda, H. M. R., Ferigolo, M., Andrade, T. M. R., & Barros, H. M. T. (2011). Aconselhamento telefônico para jovens usuários de crack. *Revista Gaúcha Enfermargem. 32*(1), 31-9.

Castro, L. A., & Laranjeira, R. (2009). Ensaio clínico duplo-cego randomizado e placebocontrolado com naltrexona e intervenção breve no tratamento ambulatorial da dependência de álcool. *Jornal Brasileiro de Psiquiatria*, *58*(2), 79-85.

Cruvinel, E., & Ronzani, T. M. (2011). Clima organizacional e atividades de prevenção ao uso de risco de álcool. *Estudos de Psicologia (Campinas)*, *28*(2), 209-217.

Cruvinel, E., Richter, K. P., Bastos, R. R., & Ronzani, T. M. (2013). Screening and brief intervention for alcohol and other drug use in primary care: associations between organizational climate and practice. *Addiction science & clinical practice*, *8*(1), 8-4.

Demyttenaere, K., Bruffaerts, R., Posada-Villa, J., Gasquet, I., & Kovess, V. (2004) Prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization. World Mental Health Surveys. *JAMA*. *29*, 2581-2590.

Flórez-Alarcón, L., & Gantiva, D. C. A. (2009). Terapias motivacionales breves: diferencias entre la aplicación individual y grupal para la moderación del consumo de alcohol y de las variables psicológicas asociadas al cambio. *Acta Colombiana de Psicologia*, *12*(1), 13-26.

Flórez-Alarcón, L., & Castellanos-Morales, C. A. (2012). Efectos de la entrevista motivacional sobre la motivación autónoma en jóvenes consumidores de alcohol. *Revista de Salud Pública*, *14*, 69-85.

Furtado, E. F., Corradi-Webster, C. M., & Laprega, M. R. (2008). Implementing brief interventions for alcohol problems in the public health system in the region of Ribeirão Preto, Brazil: evaluation of the PAI-PAD training model. *Nordic Studies on Alcohol and Drugs*, *25*(6), 539-551.

Garcia, M. L. S., Ruiz, J. F. V., Martínez, K. I. M., & Cabrera, F. J. P. (2011). Intervenciones breves con adolescentes estudiantes rurales que consumen alcohol en exceso. *Universitas Psychologica*, 10(3), 803-815.

Hoffman, K. A., Beltrán, J., Ponce, J., García-Fernandez, L., Calderón, M., Muench, J., & Fiestas, F. (2016). Barriers to implementing screening, brief intervention and referral to treatment for substance use in HIV/AIDS health services in Peru. *Revista Peruana de Medicina Experimental y Salud Pública*, *33*(3), 432-437.

Humeniuk, R., & Poznyak, V. (2004). *Intervenção breve para o abuso de substâncias: guia para uso na atenção primária à saúde* (T. M. Ronzani, trad.). Genebra: Organização Mundial da Saúde.

Junqueira, M. A. B., Rassool, G. H., Santos, M. A., & Pillon, S. C. (2015). The impact of an educational program in brief interventions for alcohol problems on undergraduate nursing students: A Brazilian context. *Journal of addictions nursing*, *26*(3), 129-135.

Jurado, J. R. H., Solaeche, F. M. L., Lugo, G., Montes, A. R. M., & Quijada, M. A. F. (2011). Estrategias de Intervención en Casos de Consumo Riesgoso de Alcohol en la Consulta de Medicina Familiar. *Archivos en Medicina Familiar*, 13 (2), 45-53.

Kaner, E. F., Dickinson, H. O., Beyer, F., Pienaar, E., Schlesinger, C., Campbell, F., & Heather, N. (2009). The effectiveness of brief alcohol interventions in primary care settings: a systematic review. *Drug and alcohol review*, *28*(3), 301-323.

Kaner, E., Bland, M., Cassidy, P., Coulton, S., Dale, V., Deluca, P., & Newbury-Birch, D. (2013). Effectiveness of screening and brief alcohol intervention in primary care (SIPS trial): pragmatic cluster randomised controlled trial. *Bmj*, *346*, e8501.

Kohn, R., Saxena, S., Levav, I., & Saraceno, B. (2004). The treatment gap in mental health care. *Bulletin of the World health Organization*, *82*(11), 858-866.

Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *PLoS medicine*, *6*(7), e1000100. Disponible en: https://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1000100

Lira-Mandujano, J., González-Betanzos, F., Carrascoza, V. C. A., Ayala, V., Héctor, E., & Cruz-Morales, S. E. (2009). Evaluación de un programa de intervención breve motivacional para fumadores: resultados de un estudio piloto. *Salud mental,* 32(1), 35-41.

Martínez, K. I. M., Pedroza, C. F. J., Vacío, M. M., Jiménez, P. A. L., & Salazar, G. M. L. (2008a). Consejo breve para adolescentes escolares que abusan del alcohol. *Revista Mexicana de Análisis de la Conducta*, *34*(2), 247-264.

Martínez, V. N. A., Icaza, M. M., Elena, M., & Berenzon, G. S. (2010a). La búsqueda de moderación en el consumo de alcohol: Adaptación de los conocimientos a la práctica. *Salud mental*, *33*(2), 161-167.

Martínez, K. I. M., Meléndez, A. B., & Trejo, A. Y. P. (2012). En voz de la experiencia: Estrategias de enfrentamiento en adolescentes que concluyeron un programa de intervención breve en consumo de alcohol. *Salud Mental*, *35*(6), 505-512.

Martínez, K. I. M., Salazar, G. M. L., Pedroza, C. F. J., Ruiz, T. G. M., & Ayala, V. H. E. (2008b). Resultados preliminares del programa de intervención breve para adolescentes que inician el consumo de alcohol y otras drogas. *Salud mental*, *31*(2), 119-127.

Martínez, K. I. M., Pedroza, C. F. J., Salazar, G. M. L., & Vacio, M. M. (2010b). Evaluación experimental de dos intervenciones breves para la reducción del consumo de alcohol de adolescentes. *Revista Mexicana de Análisis de la Conducta*, *36*(3), 35-53.

McCambridge, J. (2013). Brief intervention content matters. *Drug and Alcohol Review*, *32*(4), 339-341.

McCambridge, J., & Saitz, R. (2017). Rethinking brief interventions for alcohol in general practice. *BMJ: British Medical Journal, 356*.

Medina-Mora, M. E., Borges, G., Lara, C., Benjet, C., Blanco, J., Fleiz, C., & Zambrano, J. (2005). Prevalence, service use, and demographic correlates of 12-month DSM-IV psychiatric disorders in Mexico: results from the Mexican National Comorbidity Survey. *Psychological Medicine*, *35*(12), 1773-1783.

Moher, D., Schulz, K. F., Altman, D. G., & Consort Group. (2001). The CONSORT statement: revised recommendations for improving the quality of reports of parallel-group randomised trials. *Lancet 357*(9263), 1191-1194.

Moretti-Pires, R. O., & Corradi-Webster, C. M. (2011). Implementação de intervenções breves para uso problemático de álcool na atenção primária, em um contexto amazônico. *Revista Latino-Americana de Enfermagem*, *19*, 813-820.

O'donnell, A., Anderson, P., Newbury-Birch, D., Schulte, B., Schmidt, C., Reimer, J., & Kaner, E. (2013). The impact of brief alcohol interventions in primary healthcare: a systematic review of reviews. *Alcohol and Alcoholism*, *49*(1), 66-78.

Oliveira C. A., & Boerngen-Lacerda, R. (2015). Reducing substance involvement in college students: a three-arm parallel-group randomized controlled trial of a computer-based intervention. *Addictive behaviors*, *45*, 164-171.

Oliveira, K. D., Baracat, E. C. E., Lanaro, R., Eugeni, C., Ricci, E., Rabello, M. S., & Fraga, G. P. (2015). Consumo de álcool e intervenção breve em vítimas de trauma. *Revista do Colégio Brasileiro de Cirurgiões*, *42*(4), 202-208.

Piazza, M., & Fiestas, F. (2014). Prevalencia anual de trastornos y uso de servicios de salud mental en el Perú: resultados del estudio mundial de salud mental, 2005. *Revista Peruana de Medicina Experimental y Salud Pública*, *31*(1), 30-38.

Ronzani, T. M., Mota, D. C. B., & Souza, I. C. W. D. (2009). Prevenção do uso de álcool na atenção primária em municípios do estado de Minas Gerais. *Revista de Saúde Pública*, *43*, 51-61.

Ronzani, T. M., Ribeiro, M. S., Amaral, M. B. D., & Formigoni, M. L. O. D. S. (2005). Implantação de rotinas de rastreamento do uso de risco de álcool e de uma intervenção breve na atenção primária à saúde: dificuldades a serem superadas. *Cadernos de Saúde Pública*, *21*, 852-861.

Ronzani, T. M., Rodrigues, T. P., Batista, A. G., Lourenço, L. M., & Formigoni, M. L. O. D. S. (2007). Estratégias de rastreamento e intervenções breves para problemas relacionados ao abuso de álcool entre bombeiros. *Estudos de Psicologia (Natal)*, *12*(3) 285-290.

Saitz, R. (2010). Alcohol screening and brief intervention in primary care: absence of evidence for efficacy in people with dependence or very heavy drinking. *Drug and Alcohol Review*, *29*(6), 631-640.

Saitz, R. (2014). The best evidence for alcohol screening and brief intervention in primary care supports efficacy, at best, not effectiveness: You say tomāto, I say tomăto? That's not all it's about. *Addiction Science & Clinical Practice, 9* (1),14-14.

Saitz, R., Palfai, T. P., Cheng, D. M., Alford, D. P., Bernstein, J. A., Lloyd-Travaglini, C. A., & Samet, J. H. (2014). Screening and brief intervention for drug use in primary care: the ASPIRE randomized clinical trial. *Jama*, *312*(5), 502-513.

Salazar, G. M. L., Martínez, M. K. I., & Barrientos, C. V. (2009). Evaluación de un componente de inducción al tratamiento con adolescentes usuarios de alcohol del Distrito Federal. *Salud Mental*, *32*(6), 469-477.

Segatto, M. L., Andreoni, S., Souza e Silva, R. D., Diehl, A., & Pinsky, I. (2011). Brief motivational interview and educational brochure in emergency room settings for adolescents and young adults with alcohol related problems: a randomized single blind clinical trial. *Revista Brasileira de Psiquiatria*, *33*(3), 225-233.

Signor, L., Pierozan, P. S., Ferigolo, M., Fernandes, S., Mazoni, C. G., & Barros, H. M. T. (2013). Efficacy of the telephone-based Brief Motivational Intervention for alcohol problems in Brazil. *Revista Brasileira de Psiquiatria*, *35*(3), 254-261.

Silva, É. C., & Tucci, A. M. (2015). Intervenção breve para redução do consumo de álcool e suas consequências em estudantes universitários brasileiros. *Psicologia: Reflexão e Crítica*, *28*(4), 728-36.

World Health Organization. (2010). *The ASSIST-linked brief intervention for hazardous and harmful substance use: manual for use in primary care*. Geneve, SWZ: WHO.

Received: Aug. 31, 2018
Approved: Mar. 12, 2019

Telmo Mota Ronzani: Psychologist, Master Degree in Social Psychology Universidade Federal de Minas Gerais, Ph.D. in Health Science. Department of Psychology. Universidade Federal de Juiz de Fora (UFJF). Head of Centro de Referência em Pesquisa, Intervenção e Avaliação em Álcool e Drogas-CREPEIA. Research Productivity Fellowship CNPq.

Cristina Fuentes-Mejía: Psychologist, Master Degree in Education and Ph.D. Doutora in Psychology. Professor at Psychology Department from Universidad Minuto de Dios Bogotá, Colômbia.

Daniela Cristina Belchior Mota: Psychologist, Master Degree and Ph.D. in Psychology. Professor at Centro de Ensino Universitário CES- Juiz de Fora. Researcher in the Centro de Referência em Pesquisa, Intervenção e Avaliação em Álcool e Drogas-CREPEIA.

Henrique Pinto Gomide: Psychologist, Master Degree and Ph.D. in Psychology. Professor at the Department of Education. Universidade Federal de Viçosa (UFV). Researcher in the Centro de Referência em Pesquisa, Intervenção e Avaliação em Álcool e Drogas-CREPEIA.

Maira Leon Ferreira: Psychologist, Master Degree and Ph.D. in Psychology. Professor at the Department of Psychology. Universidade Estácio de Sá, Juiz de Fora. Researcher in the Centro de Referência em Pesquisa, Intervenção e Avaliação em Álcool e Drogas-CREPEIA.

Erica Cruvinel: Psychologist, Master Degree in Public Health and Ph.D. in Psychology. Pos Doc Fellowship in Preventive Medicine and Public Health, Kansas University.