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Barriers and facilitators to the implementation of interventions to prevent youth

violence in Latin America: a systematic review and qualitative evidence synthesis

Youth violence in Latin America is an important public health problem. However, the

evidence from preventive programmes within the region to address this problem is limited.

Identifying context-specific factors that facilitate or hinder the success of interventions is

necessary to guarantee the successful implementation of new preventive strategies. We

present a systematic review and synthesis of qualitative studies to identify factors affecting

the implementation of programmes to prevent youth violence in Latin America. We searched

10 electronic databases and websites of international institutions. The quality of the studies

was assessed using the CASP checklist, while the certainty of the findings of the synthesis

was assessed using the CerQual approach. We included eight papers describing five

programmes in Argentina, Venezuela, Peru, El Salvador and Mexico. Most of the factors

affecting the implementation of programmes were aspects related to features of the

programmes and social/political constraints. The synthesis suggests that future programmes

can benefit from having a multi-disciplinary and/or multi-sectoral approach involving

different key players. At the same time, potential strategies for avoiding problems related to

such active engagement should be planned, via promoting effective channels for

communication and supervision. The review also suggests the importance of increasing

awareness and motivation towards the problem of youth violence among relevant agencies

and stakeholders. While the limited volume and quality of the literature impact on the ability

to draw conclusions, the results could be useful for new programmes being designed and the

ones seeking to be adapted from other contexts.

Key words: Youth violence; bullying; community violence.

2

Barriers and facilitators to the implementation of interventions to prevent youth violence in Latin America: a systematic review and qualitative evidence synthesis

Introduction

During the last two decades, there has been a growing recognition in relation to the problem of youth violence as a public health concern throughout the world (Matjasko et al., 2012; Office of the Surgeon General (US), National Center for Injury Prevention and Control (US), National Institute of Mental Health (US), & Center for Mental Health Services (US), 2001). Youth violence is a form of community interpersonal violence; it can be defined as intentional behaviours inflicted by people aged 10-24 years that threaten to cause or cause harm to other people who are not relatives (Dahlberg & Krug, 2002; Guerra, 2005).

While violence is a problem faced by many countries, Latin America has been traditionally recognised as one of the most violent regions in the world (Moser & McIlwaine, 2006; Peetz, 2011). Higher numbers of intentional homicides are found in Central and South America, with rates above 20 homicides per every 100,000 population in comparison to the global rate of 6.2. Murders among young men aged 15-29 in these two regions are up to four times higher than the global rate for this age group (UNODC, 2014). Effective prevention strategies are urgently needed.

The origins of juvenile violence in Latin American are believed to be closely related to a complex social environment, as high levels of inequality are present in the region (Perel, Casas, Ortiz, & Miranda, 2006). In addition, accelerated urban growth, high levels of poverty, the persistence of traditional role models promoting the involvement of men in risky practices, the low quality of education and the context of drug-trafficking and crime also contribute to

the proliferation of youth violence, aggression and/or crime (Briceño-León, Villaveces, & Concha-Eastman, 2008; Heinemann & Verner, 2006; Moser & van Bronkhorst, 1999; Willman & Makisaka, 2010).

In face of the significant levels of youth violence and bullying, many prevention efforts have been implemented globally; progress has been made in identifying programmes with the best evidence of impact in the prevention of youth violence (Matjasko et al., 2012). Internationally, existing systematic reviews have been conducted to identify best practices to prevent violence, crime and antisocial behaviours among children and young people. To date, there is a growing body of evidence assessing the effectiveness of community programmes (Tolan, Henry, Schoeny, & Bass, 2008; Wilson & Lipsey, 2000); family-based programmes (Bilukha et al., 2005; Maughan, Christiansen, Jenson, Olympia, & Clark, 2005; Piquero, Farrington, Welsh, Tremblay, & Jennings, 2008); school-based interventions (R. Hahn et al., 2007; J. Mytton, DiGuiseppi, Gough, Taylor, & Logan, 2006; J. A. Mytton, DiGuiseppi, Gough, Taylor, & Logan, 2002; Oliver, Wehby, & Daniel, 2011; Wilson & Lipsey, 2007); and other interventions such as recreational or after-school programmes (R. A. Hahn et al., 2005; Kremer, Maynard, Polanin, Vaughn, & Sarteschi, 2015; Limbos et al., 2007; Matjasko et al., 2012; Petrosino, Turpin-Petrosino, Hollis-Peel, & Lavenberg, 2013; Weinstein, Fuller, Mulrooney, & Koch, 2014).

However, most of the syntheses published so far regarding the prevention of youth violence describe experiences of interventions implemented in high-income regions. The evaluation of preventive programmes particularly in Latin America is limited. Thus, for many countries, the policy recommendations for youth violence prevention are based predominantly on experiences from countries with different societies and environments. This is relevant since

preventive interventions are embedded within a social context; their implementation can be affected by individual, organisational and systems factors (Forman, Olin, Hoagwood, Crowe, & Saka, 2009). For example, Forman et al. (2009) found within a sample of developers of school-based mental health interventions, that seven in 10 had modified the intervention when trying to implement the programmes in other schools. Another study about evidence-based programmes to prevent substance abuse and school crime in the US showed that less than half of the schools that implemented evidence-based programmes achieved a high-quality implementation (Crosse et al., 2011).

How an intervention is delivered, the infrastructure of the system and the beneficiary population, are factors that can affect an "outcome" as the intervention itself (Kelly et al., 2010). To promote efficient planning, there is a need to understand how interventions operate in the real world (Galbraith, 2004). Identifying context-specific factors that hinder or facilitate the success of programmes is required so that promising interventions are implemented successfully. A full understanding of such factors could also help in deciding which interventions warrant investment.

The aim of this study was to identify and synthesise qualitative research reporting factors affecting the implementation of interventions to prevent youth violence, crime and bullying in Latin America. We looked for studies reporting factors affecting either a) the participation of the population in the interventions, or b) the functioning and operation of the interventions.

Materials and Methods

We carried out a systematic review of qualitative studies describing experiences surrounding the implementation of a primary or secondary prevention programme. Primary prevention focuses on reducing risk factors or in promoting protective factors among the general population, while secondary prevention aims to target groups with a high risk of exhibiting violent or criminal behaviours; tertiary prevention interventions are designed to avoid repeated offences among young people already involved in violence or crime (Imbusch, Misse, & Carrion, 2011) and will not be included here as they might demand the involvement of rehabilitation strategies.

This review was conducted according to standards from the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Moher, Liberati, Tetzlaff, Altman, & . 2009; Moher et al., 2015) and the Enhance Transparency in Reporting Qualitative Evidence Synthesis (ENTREQ) statement (Tong, Flemming, McInnes, Oliver, & Craig, 2012). A protocol was initially prepared and is available from the authors. Searching and data extraction were conducted by the lead researcher, with decisions regarding the selection of studies for inclusion made by the full team. In this manuscript, the terms "programme" and "intervention" are considered interchangeable.

Inclusion and Exclusion Criteria

Inclusion and exclusion criteria were based on the elements in the SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research type) framework (Cooke, Smith, & Booth, 2012). Studies were considered for inclusion if: the sample (S) included individuals that coordinated, implemented or attended to an intervention; the phenomenon of interest (PI) was the implementation of an intervention to reduce or prevent violence, aggression, bullying or crime among youths; the study design (D) was any type of qualitative design such as structured or in-depth interviews, focus groups, observations or case studies; the manuscript presented an evaluation (E) regarding experiences or views on the implementation of a

programme; the research type (R) was any type of study presenting qualitative data, including mixed-methods. Lastly, studies were included if the programme was implemented in countries from Central or South America, excluding Surinam, French Guiana, Guyana and the Caribbean. We included both published and unpublished reports.

Manuscripts were excluded if: they were not in English or Spanish; described a pharmacological or punitive intervention (i.e. not focused on prevention) or a structural intervention involving the modification of the physical context only; described the design of an intervention only; were focused on dating, sexual or domestic violence.

Search Strategy

The search of the literature was conducted between April-May 2015. We searched the following academic databases: Applied Social Sciences Index and Abstracts, Cumulative index to nursing and allied health literature, ProQuest Dissertations & Theses A&I,
International Bibliography of the Social Sciences, LILACS, PsycINFO, SCIELO, SCOPUS,
Social Services Abstracts and Sociological Abstracts. The search strategy built on a large list of keywords based on five groups of concepts according to the SPIDER criteria: Intervention
OR Programme OR Curriculum, etc.; "Youth violence" OR "Juvenile Violence" OR
Bullying, etc.; Views OR Experiences OR Barriers OR Facilitators, etc.; "Qualitative
Methods" OR Qualitative OR "Qualitative Research" OR "Mixed Methods", etc.; Interviews
OR "Focus Groups" OR "Case Study", etc.; "Latin America" OR Argentina OR Belize, etc.
The search was adapted to Spanish for two databases and was conducted without restrictions.

We also searched for new manuscripts listed in the reference lists of the papers included and other relevant manuscripts, and also conducted a citation search in Google Scholar to identify recent manuscripts citing those papers selected for inclusion. In addition, we searched for papers on the websites of international institutions (e.g. the International Centre for the Prevention of Crime, the Inter-American Development Bank, the World Bank, among others). This last step in the search was done in parallel to another ongoing systematic review focused on the impact of interventions. Thus, from the websites, both quantitative and qualitative papers were retrieved for assessment but only those presenting evidence about factors affecting the implementation were included in this synthesis.

Study Selection and Data Extraction

Records from the searches were exported into EndNote version X7. After eliminating duplicates, a first screening of titles and abstracts was conducted. The full-text of documents potentially meeting inclusion criteria were retrieved for a second screening. A pre-designed data extraction sheet was used for retrieving information from the selected studies including a) publication details; b) design of the study; and c) intervention description. Segments of text describing factors affecting the implementation of the interventions were also extracted.

Quality Assessment

The quality of the included studies was assessed using the Critical Appraisal Skills Programme (CASP) checklist for qualitative research (Critical Appraisal Skills Programme (CASP), 2014), consisting of 10 questions that can be answered with "Yes" "No" and "Can't tell", in relation to methodological and reporting issues. Quality was not used as an exclusion criterion.

Data Synthesis and Analysis

We conducted a thematic synthesis guided by the SURE (Supporting the use of research evidence for policy in African health systems) framework (The SURE Collaboration, 2011). This framework provides a list of barriers to the implementation of policies, organised according to different levels or dimensions such as recipients of the programmes, providers, stakeholders, programme or system constraints and social/political constraints. The use of this framework enabled comparison across the studies using a systematic and structured approach (Glenton et al., 2013).

The synthesis followed an iterative process of developing and refining the initial framework via the following steps: 1) adaptation of the SURE framework to the question of this review); 2) review of studies; 3) identification and extraction of segments of text describing outcomes of interest; 4) coding of text according to themes in the adapted framework; 5) identification of new themes; 6) re-review of findings from the original studies (link to step 3); 7) coding of barriers and facilitators within the main themes and across the different levels of the framework. At the conclusion of this process, inferences regarding findings and relations among factors were made. Summary tables and figures were developed.

Assessing the Confidence in the Findings

The strength of the overall evidence was assessed using the CerQual (Certainty of the Qualitative Evidence) method which is based on the assessment of two factors: firstly, the assessment of the quality of each of the individual studies by using a tool such as CASP. Secondly, the plausibility or coherence of a finding i.e. the degree to which it is possible to detect a pattern across studies. A pattern could include a finding that is present consistently across multiple studies or contexts (Glenton et al., 2013). Each barrier or facilitator was rated

according to these two criteria. The certainty of each finding could then be classified as: high, if supported by rigorous studies and a pattern across studies exists; moderate, when there are concerns on methodological limitations or the coherence of the finding; or low, when there are important methodological limitations and concerns over the coherence of the finding.

Results

Only twenty-five records were identified from the searches in academic databases. After searching in websites, reference lists and conducting citation searches, eight papers representing five programmes were included in total (Berk-Seligson, Orcés, Pizzolito, Seligson, & Wilson, 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012; Medan, 2011, 2012, 2013; Schnell, 2012; Uy, 2012). Figure 1 outlines the studies selection process.

Description of the studies

A summary of the studies is provided in Table 1. The interventions were community-based (Berk-Seligson et al., 2014; Medan, 2011, 2012, 2013; Schnell, 2012; Uy, 2012); school-based (Bustos & Aldaz, 2006); or family-based (Castro & Escribens, 2012), and involved a number of different components such as training to students, parents or key players in the community. Most of the studies lacked a clear description of data collection, selection of participants, ethical matters or data analysis procedures, leading to concerns regarding their methodological rigour (Table 1).

Barriers and Facilitators to the Implementation of Programmes

Data were identified which related to four dimensions according to the SURE framework: recipients of the programmes; providers of the programmes and other key players/stakeholders; programmes constraints; and social or political constraints. Within these

dimensions, 26 themes relating to barriers and 16 relating to facilitators were identified. Given the limited quality and number of studies detected, we did not rank any theme as evidence with high certainty. However, we considered a finding to be of moderate certainty if three or more studies provided evidence relating to it. If a theme was supported only by one or two studies, then the certainty was considered to be low. The complete list of themes relating to barriers and facilitators across the four dimensions is presented in Figure 2. As a supplementary material, we have prepared a table with the complete description of barriers and facilitators and the studies contributing to each of them (Appendix A).

- 1. Programme recipients. Themes within this dimension relate to young people participating in programmes or their parents. Two barriers were identified: firstly, a belief that the programme is designed for people having nothing important to do discouraged some parents from participation (Bustos & Aldaz, 2006); and secondly, complex situations in participants' lives such as family dynamics, maternity or the need for income sometimes limited the achievement of goals or attendance at programmes (Bustos & Aldaz, 2006; Medan, 2011, 2013). The only facilitator found in this theme relates to the motivation of participants, which was described as enhancing access to and continuation in the programmes (Bustos & Aldaz, 2006; Medan, 2011, 2013).
- 2. Programme providers and other stakeholders and key players. In this dimension, we included themes relating to individuals implementing the interventions as well as other stakeholders or key players such as programme managers, community leaders, educational or health authorities, policy makers or donors. In total, four barriers were identified. Firstly, there was moderate certainty regarding the evidence that the implementation of an intervention could be adversely affected by providers or key stakeholders that have a low commitment to a programme (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012). Secondly, authors reported that teachers could

lack confidence in coping with emotional situations arising from prevention activities, for example emotional reactions from parents when talking about life experiences (Bustos & Aldaz, 2006). The third barrier identified was that in some contexts, teachers or school personnel were reluctant to get involved in conflict mediation due to fear of students involved in gangs (Berk-Seligson et al., 2014). Lastly, another barrier indicated that negative beliefs from the teachers or other stakeholders about a programme approach or effectiveness could limit their involvement on the activities of an intervention (Bustos & Aldaz, 2006; Castro & Escribens, 2012).

On the other hand, three facilitators were identified. Studies consistently documented the importance of skills/knowledge of providers in facilitating the implementation. For example, Castro & Escribens (2012) and Berk-Seligson et al. (2014) highlighted that teachers were a key element in programmes since they already know how to approach and work with parents and students. Uy (2012) described how a parents' union had an important role in motivating other families to participate or to perform tasks. Another consistent facilitator reported, was that providers or stakeholders who understood the relevance of a programme, that is, that were sensitised in relation to the programme, were more involved in the activities and operation of the interventions (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012; Uy, 2012). Also, a desire for contributing to the community facilitated the involvement of key players (Berk-Seligson et al., 2014; Uy, 2012).

3. Programmes' constraints. We identified 11 barriers within this component and among these, the majority of studies provided evidence relating to five barriers. Firstly, one of the most frequently reported barriers was lack of materials or facilities (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012; Uy, 2012). A second barrier was lack of clarity or inconsistency in programmes' rules (Berk-Seligson et al., 2014; Bustos &

Aldaz, 2006; Medan, 2013). The need to choose between adherence to high standards of implementation or a more flexible scheme was also frequently outlined, especially when resources and time constraints were present (Bustos & Aldaz, 2006; Castro & Escribens, 2012; Uy, 2012); for example, training may be shortened due to cost or time constraints (Castro & Escribens, 2012). Also, moderate strength was found in evidence showing problems arising due to a limited number of trained providers in the community, since this shortage affected the ability to reaching greater numbers of participants, or carrying out more activities (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012; Uy, 2012). Relating to this, the training of providers was commonly reported to be either short, long or expensive (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012).

Other barriers were: the limited time that school personnel (who often acted as providers of the interventions) has for training or for delivery of the interventions (Bustos & Aldaz, 2006; Castro & Escribens, 2012); problems relating to an inefficient communication between the different key players involved (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006); an inadequate supervision of the interventions that could be perceived as an overload of work (Bustos & Aldaz, 2006); the need to submit frequent reports regarding implementation of the interventions (bureaucracy) (Bustos & Aldaz, 2006); lack of a defined scheme for referring violent students or those affiliated with gangs to other specialised services (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006); and lastly, problems initiating new interventions within the well-defined structure of the educational or health systems (Berk-Seligson et al., 2014; Castro & Escribens, 2012).

Among the facilitators, 11 themes were identified. Most of the authors reported that the involvement of different sectors, institutions, organisations or stakeholders (i.e. a multidisciplinary and/or multi-sectoral collaboration) was important. Participation of community leaders, educational or health authorities had an important role in achieving wide programme coverage and successful performing of activities due to the diverse experience of those involved. For example, community-based organisations were described as key to reaching youths (Berk-Seligson et al., 2014), whereas schools were key in reaching parents (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012). Authors also mentioned that creating links between new programmes and previous efforts conducted by schools or communities, facilitated the implementation of new preventive activities (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006; Castro & Escribens, 2012).

Supervision was essential to enable implementation of the interventions as planned by the coordinators (Bustos & Aldaz, 2006). In addition, good communication facilitated the coordination of activities among the key players (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006) and in turn, a good coordination allowed efficient distribution of roles and responsibilities and multi-disciplinary work (Bustos & Aldaz, 2006; Castro & Escribens, 2012). Another factor that contributed to the operation of interventions centered in schools, was using skill-based approaches similar to the one used by the national educational system (Bustos & Aldaz, 2006); while the health system was described as facilitating referring of participants to other specialised areas when needed (Castro & Escribens, 2012). The involvement of psychologists and social workers was beneficial to lead activities that traditional providers could not perform (such as emotional support) (Berk-Seligson et al., 2014; Bustos & Aldaz, 2006). Another facilitator was obtaining funding from both private and public institutions including local governments since it guaranteed that materials and

facilities were available (Castro & Escribens, 2012; Uy, 2012). Related to this, economic incentives to participants were described as being helpful to prevent youths abandoning the programme to start a job (Medan, 2013; Uy, 2012). Lastly, strict methodological standards facilitated the implementation of programmes (Castro & Escribens, 2012; Uy, 2012).

4. Social or political constraints. In this dimension, nine barriers were found. There was moderate evidence that insecure or violent contexts can act as an important barrier impacting on programme provision; for example areas with a presence of gangs (Berk-Seligson et. al., 2014) or communities known for being violent (Bustos & Aldaz, 2006). Other barriers with a lesser degree of consistency were the loss of trained providers due to frequent staff turnover at the educational or health system (Bustos & Aldaz, 2006; Castro & Escribens, 2012) and strikes among teachers (Castro & Escribens, 2012). Other constraints were the lack of clear regulations on what to do regarding gangs or juvenile violence in schools; and involving the police since it can adversely affect the credibility of a programme when the police is perceived to be corrupt (Berk-Seligson et al., 2014).

Other barriers were difficulties reaching women, since juvenile violence is less legitimised in females (Medan, 2013); implementing a standard programme within heterogeneous populations (Bustos & Aldaz, 2006; Castro & Escribens, 2012); and differences between social codes promoted by a programme and codes present in a community (Medan, 2011, 2012). Lastly, it was described that local authorities can put pressure in order to achieve a large coverage of participants even if this compromises the quality of interventions (Castro & Escribens, 2012; Uy, 2012). Only one facilitator was present, showing the benefits of involving religious leaders in the programmes since they can contribute to reaching at-risk-youths (Berk-Seligson et al., 2014).

Discussion

This qualitative evidence synthesis explored factors affecting the implementation of programmes to prevent youth violence in Latin America. To our knowledge, this is the first systematic review and qualitative synthesis reported on this topic focused in this region.

According to the included studies, the majority of factors affecting the implementation of programmes were aspects related to features of the programmes and social or political constraints. The review suggests that programme implementers can concentrate on addressing these issues before implementation. Some of the main findings are discussed below.

One of the findings which is consistent across the majority of the studies is that the involvement of different sectors, institutions or levels helped in reaching out to more participants or in implementing diverse preventive activities. It is possible then that future programmes benefit from having a multidisciplinary, multi-sectoral and/or multi-level approach involving different stakeholders and key players. This is consistent with previous international research showing that the most effective programmes to prevent interpersonal violence tend to involve both local governments and regional frameworks or initiatives (Willman & Makisaka, 2010). By engaging different levels of stakeholders it will be possible to reach a more diverse population or to efficiently distribute roles and responsibilities. A multi-disciplinary approach could also facilitate making links between new initiatives and previous efforts or programmes implemented in the community (Forman et al., 2009), which is another facilitator identified in our sample of studies. In addition, the involvement of both public and private institutions could contribute to obtaining sufficient funding for expenses related to the implementation, since the lack of materials and facilities was a barrier reported by the majority of the authors. Private institutions can be encouraged to see programmes as an investment opportunity (Uy, 2012).

Many of the programmes identified in this review reported experiencing difficulties related to the training of providers. There is a need to guarantee a sufficient number of providers prior to implementation, and training schemes should be designed with the consideration of time constraints and availability of traditional providers such as teachers or school personnel (Forman et al., 2009). Again, a multi-disciplinary collaboration with different organisations would provide access to a wider range of potential providers.

While there might be clear advantages of engaging multi-disciplinary and multi-level groups, a focus should be placed on achieving effective coordination between the stakeholders involved. Such coordination could be achieved by establishing well-structured channels for communication. Effective communication could also enable closer and more effective supervision, improving the fidelity of the intervention. As documented in the included studies, when communication fails, programme management can be perceived as overly bureaucratic, especially if there is a need to submit numerous reports. Implementers should carefully decide on the types of information they need from the providers and coordinators of the interventions. One way of promoting communication and coordination might be by increasing levels of awareness among providers and other stakeholders regarding the problem of youth violence, and the goals of a programme. Awareness-raising should aim to achieve the support of authorities and stakeholders and to promote collaborative work, which could in turn translate into more motivation and more active participation in the planning and delivery of interventions.

Effective communication and increased awareness among stakeholders might also contribute to reducing methodological constraints. Many providers and intervention implementers face the need to make decisions regarding maintaining the methodological quality of the

intervention, meaning a more expensive and numerically-limited approach, or opting for a more flexible and resource-saving one. Pressure may particularly come from local authorities (from municipalities, the Government or the educational system) to place an emphasis on quantity rather than quality. Promoting rigorous methodological standards for the implementation could contribute to minimising such pressure, but to achieve this there is a need to increase knowledge and awareness among stakeholders and authorities, regarding the importance and goals of the programmes and conditions required to implement them.

Other aspects that planners of programmes can consider are related to the social context in which a programme is intended to be implemented. The interventions focused on schools need to recognise that frequent strikes called by teachers unions are a reality for many countries in Latin America (Kingdon et al., 2014). As a result of this, the provision of school-based programmes could be adversely affected. The violent context that prevails in many cities from the region is another reality that programme designers need to consider. This is linked to the fact that many schools do not know what to do with the more violent students or those affiliated with gangs. Since an inter-sectoral collaboration between the educational and health system is not already established, referring of students to specialised services may be a less formal and straightforward process.

Lastly, Latin America is a heterogeneous region; programme implementers need to reflect on the possibility of adapting the interventions to different types of populations, taking into account diverse socio-economic and demographic profiles while designing the interventions. Poverty, early parenthood/motherhood and gendered relationships are factors affecting the daily lives of youths and should be carefully contemplated in preventive programmes.

Limitations of the Study

We should note some limitations of this review. The most important concern relates to the number of included studies and their quality. While we searched in a large number of academic databases, we only found five studies; most of them in the form of reports not published in peer-reviewed journals. The reports lacked detailed information to assess their quality, raising methodological concerns. Considering this, none of the findings presented here can be said to be supported by a high degree of certainty, which limits the overall strength of the review findings. Thus, our claims should be interpreted with caution.

Also important is that many of the documents included were not exclusively focused on exploring barriers or facilitators for implementation. This synthesis is based on an interpretation of the findings originally reported by the authors, since the evidence available at times was unclear. For example, it was often difficult to differentiate between data describing factors related to the design of a programme, and factors related to the implementation.

Another potential limitation is related to the framework used to guide the synthesis. We identified more barriers than facilitators for all of the different dimensions explored. However, this fact may reflect the focus of the SURE framework, which is aimed particularly at identifying barriers (The SURE Collaboration, 2011) and not general themes relating to barriers and facilitators.

Although there are concerns regarding the strength of the evidence, we found some consistent results among studies, some of which echo elements identified in previous research. Forman et al. (2009) reported issues affecting implementation related to: support of the school

principal, teachers or administrators; financial resources; training and consultation strategies; alignment of the intervention with the school approach, goals or programmes; and turnover of staff. Similarly, in a study about the implementation of positive behaviour support interventions on schools, the authors documented the following factors affecting implementation: administrative support; a reward system for students and staff; data; working as a team; involving family and communities; turnover; time constraints; lack of knowledge; and team preparation (Kincaid, Childs, Blase, & Wallace, 2007).

While the studies for this review came from only five countries (Argentina, Venezuela, Peru, El Salvador and Mexico), the factors identified could represent realities present in many other countries in Latin America. For example, the studies by Berk-Seligson et al., (2014), Schnell (2012), Uy (2012), Medan (2011; 2012; 2013) portrayed the case of a programme implemented in a generalised context of violence, while Castro (2012) described a context where strikes among teachers are frequent, and similar to Bustos & Aldaz (2006) presents the case where constant staff turnover on the health and educational system occurs.

To conclude, the results of this synthesis add valuable information by identifying potential factors that can affect implementation and outcomes of promising interventions to prevent youth violence in Latin America. This synthesis could guide practitioners to anticipate situations that could be present during implementation (Kok, Vaandrager, Bal, & Schuit, 2012). The information could be useful for both newly designed programmes and those seeking to be adapted from other contexts. Programme designers could consider the benefits of promoting an active involvement of different institutions and key players, but at the same time, strategies for avoiding problems related to such active engagement should be planned. This synthesis shows the need of more rigorous research on this topic in Latin America.

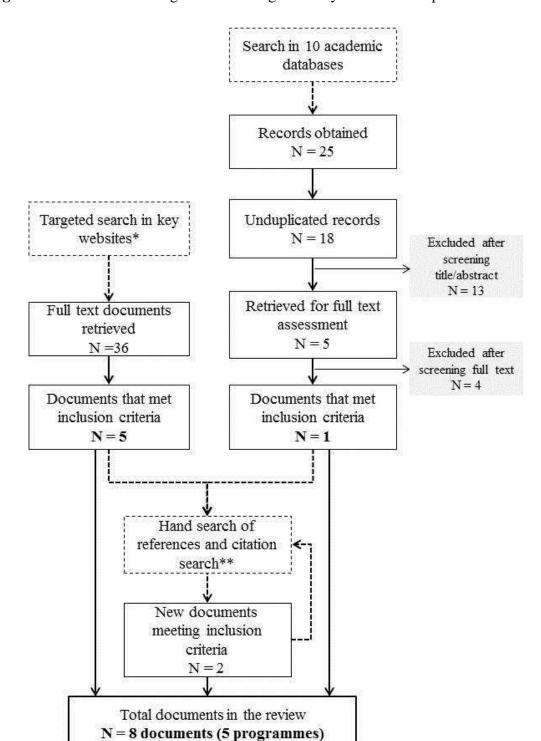


Figure 1. PRISMA flow diagram illustrating the study identification process.

^{*} Only full-text documents retrieved. This step was done in parallel to another systematic review focused on quantitative studies. Thus, the number of papers selected for assessment included both qualitative and quantitative methodologies.

^{**} The hand searching of references and the citation search was done for all the papers retrieved for full-text assessment.

Figure 2. Barriers and facilitators affecting the implementation of programmes. Certainty of the evidence is presented in parentheses.*

1. Recipients of the programme

BARRIERS

- · A belief that the programme was designed for people having nothing important to do (low)
- Complex individual socioeconomic circumstances such as maternity or need for incomes (low)

FACILITATORS

· Individual motivation to access and continue in the programme (low)

2. Providers, stakeholders or key players

- · Less motivation that leads to less commitment (moderate)
- Teachers' limited skills to manage emotional situations arising from the activities with the participants (low)
- School personnel or teachers' fear of getting involved into conflicts in unsafe or violent contexts (low)
- · Beliefs about the programme approach, appropriateness or effectiveness (low)

- Teachers and key players, such as community leaders or parents' unions, can contribute with specific tasks they are already good at (moderate)
- Sensitisation towards the goal or relevance of the programme (moderate)
- · Desires for contributing to the community (low)

3. Programme constraints BARRIERS

- Lack of facilities: materials, documents
 Involvement of different sectors, or physical space (moderate)
- · Programme's rules not consistent or clear (moderate)
- · A need to choose between quantity or quality regarding fidelity of implementation (moderate)
- · Limited number of trained providers (moderate)
- Training for providers is short, long or costly (moderate)
- School personnel do not have time for training or implementation (low)
- · Communication problems among the different key players (low)
- Supervision can be perceived as an administrative task (low)
- Numerous reports to submit (<u>low</u>)
- Lack of a system for referencing participants to other services (low)
- · Problems to align a programme within the educational/health system (low)

FACILITATORS

- institutions, stakeholders or key players (moderate)
- Links between the programme and previous prevention efforts (moderate)
- · Supervision from the implementing agencies (low)
- · Effective internal and external communication (low)
- · Coordination between key players (low)
- Alignment to the approach of the educational system (low)
- · A structure that facilitates referencing participants to other services (low)
- · Including social workers and psychologists in tasks that teachers could not perform (low)
- Funding from public and private institutions and local governments (low)
- · Economic incentives to avoid afterschool jobs (low)
- Strict methodological standards (low)

4. Social and political constraints

BARRIERS

FACILITATORS

- •Violent or insecure contexts (moderate) The involvement of religious leaders · Frequent staff turnover both in can help to reach very at-risk-youths education and health systems (low)
- Frequent strikes among teachers (<u>low</u>)
- Absence of regulations for addressing problems of gangs or violence in the school (low)
- The police can be perceived as being corrupted (low)
- · Most-at-risk women are not reached since crime is less legitimised in females (low)
- Heterogeneous population (low)
- Social codes in the community different to those proposed by a programme
- · Governmental authorities place an emphasis on numbers of individuals attended instead of quality of interventions (low)

*Based on a thematic analysis guided by the SURE Framework; certainty of the evidence assessed according to the CerQual approach.

Table 1. Characteristics of the studies. Factors affecting the implementation of interventions to prevent youth violence in Latin America.

	Medan, M	Uy, M	Castro, A	Berk-Seligson et al., (2014);	Bustos, O & Aldaz, E
	(2011, 2012 and 2013)	(2012)	(2012)	Schnell, C (2012)	(2006)
Study ID	1	2	3	4	5
Characteristics of the studies	A		5	FIO.1.	
•	Agentina	Venezuela	Peru	El Salvador	Mexico
Programme name	Comunidades Vulnerables	Orquestas Juveniles e Infantiles	Familias Fuertes Amor y Límites	Central America Regional Security Initiative (CARSI)	Contra la violencia, eduquemos para la paz
Programme type	Community-based; workshops	Community-based; musical training	Family-based; groups of parents and/or adolescents	Community-based; multiple strategies	School-based; family-based
Study design	Qualitative	Qualitative, Ethnography	Qualitative	Mixed-methods	Mixed-methods
Study setting	At-risk neighbourhoods	Schools; community	Schools	At-risk neighbourhoods	Schools
Study population	Youths; programme implementers	Programme administrators; nucleo coordinators; students; parents; teachers	Programme coordinators and implementers	Community leaders; school staff, religious leaders; police officers; implementing partners; youths	
Data collection method	Participant observation, interviews and reviews of documents	Interviews	Interviews	Semi-structured interviews and focus groups	Semi-structured interviews and focus groups
Quality assessment ^a of the studies					
Clear research aim	Yes	Yes	Yes	Yes	Yes
Qualitative methodology appropriate	Yes	Yes	Yes	Yes	Yes
Research design appropriate	Yes	Yes	Yes	Yes	Yes
Recruitment strategy appropriate	Can't tell	Can't tell	Can't tell	Can't tell	Can't tell
Data collection strategy appropiate	Can't tell	Can't tell	Can't tell	Yes	Can't tell
Relationship between researcher and participants adequately considered	(`an't tall	Can't tell	Can't tell	Can't tell	Can't tell
Ethical issues taken into consideration	Can't tell	Can't tell	Can't tell	Can't tell	Can't tell
Data analysis sufficiently rigorous	Can't tell	Can't tell	Can't tell	Yes	Can't tell
Clear statement of findings	Can't tell	Can't tell	Can't tell	Yes	Can't tell

a = Using the Qualitative Research Checklist from the Critical Appraisal Skills Programme (CASP), 2014

Table 2. Critical findings.

- Youth violence is a public health concern in Latin American, but the evaluation of preventive programmes in the region is
- Research is needed to understand how interventions operate under conditions present in the region.
- This systematic review identified factors affecting the implementation of five programmes in Argentina, Venezuela, Peru, El Salvador and Mexico.
- The majority of barriers and facilitators affecting implementation were aspects relating to features of the programmes and to social or political constraints.
- Few factors were found relating to the recipients of the programmes.
- The implementation of an intervention could be adversely affected by providers or stakeholders having low commitment to a programme.
- Many of the programmes experienced difficulties related to the training of providers.
- The involvement of different sectors, institutions, organisations or stakeholders, and the creation of links between new programmes and previous prevention efforts, contributted to the implementation of the programmes.
- The need to choose between adherence to high standards of implementation or a more flexible scheme was frequently outlined.
- Most of the studies lacked a clear description of data collection, participants' selection, ethical matters or analysis.

Table 3. Implications for practice, policy and research.

- Aspects identified in this synthesis could guide practitioners to anticipate situations that could be present when implementing preventive strategies in Latin America.
- The factors addressed here could be valuable for new programmes being designed and those being adapted from other contexts.
- Programme designers should consider a multi-disciplinary, multisectoral and/or multi-level approach involving different stakeholders and key players in the planning and implementation.
- At the same time, a focus should be placed on achieving an effective coordination and communication between the key players involved.
- Also important is to increase levels of awareness among providers and other stakeholders regarding the problem of youth violence and relevance of preventive programmes.
- More research is needed regarding the implementation of programmes to prevent youth violence, crime and bullying in Latin America, assuring a clear reporting of methodological features and findings.

References

- Berk-Seligson, S., Orcés, D., Pizzolito, G., Seligson, M. A., & Wilson, C. (2014). *Impact Evaluation of USAID's Community-Based Crime and Violence Prevention Approach in Central America: El Salvador Country Report* Retrieved from http://www.vanderbilt.edu/lapop/carsi/El Salvador v22 English W 04.08.15.pdf
- Bilukha, O., Hahn, R. A., Crosby, A., Fullilove, M. T., Liberman, A., Moscicki, E., . . . Preventive, T. F. o. C. (2005). The effectiveness of early childhood home visitation in preventing violence A systematic review. *American Journal of Preventive Medicine, 28*(2), 11-39. doi: 10.1016/j.amepre.2004.10.004
- Briceño-León, R., Villaveces, A., & Concha-Eastman, A. (2008). Understanding the uneven distribution of the incidence of homicide in Latin America. *International Journal of Epidemiology*, *37*(4), 751-757.
- Bustos, O., & Aldaz, E. (2006). Reporte final de la evaluación del proyecto "Contra la Violencia, Eduquemos para la Paz, por Ti, por Mí y por Todo el Mundo", con base en el convenio de cooperación no. 2004-05 entre UNICEF Y GEM, celebrado el 25 de Junio de 2004 para la ejecución de este proyecto. Retrieved from http://www.unicef.org/evaldatabase/files/EVALUACION IMPACTO GEM 16junio 2006.pdf
- Castro, A., & Escribens, P. (2012). Experiencia de Implementación del Programa Familias Fuertes Amor y Límites en el Perú. Una Experiencia de Institucionalización. http://www.bvsde.paho.org/documentosdigitales/bvsde/texcom/sct/052213.pdf
- Cooke, A., Smith, D., & Booth, A. (2012). Beyond PICO: The SPIDER Tool for Qualitative Evidence Synthesis. *Qualitative Health Research*, 22(10), 1435-1443. doi: Doi 10.1177/1049732312452938
- Critical Appraisal Skills Programme (CASP). (2014). Qualitative Research Checklist 31.05.13. from http://media.wix.com/ugd/dded87 29c5b002d99342f788c6ac670e49f274.pdf
- Crosse, S., Williams, B., Hagen, C. A., Harmon, M., Ristow, L., DiGaetano, R., . . . Program Studies, S. (2011). Prevalence and Implementation Fidelity of Research-Based Prevention Programs in Public Schools. Final Report: Office of Planning, Evaluation and Policy Development, US Department of Education.
- Dahlberg, L. L., & Krug, E. G. (2002). Chapter 1. Violence- A global public health problem. In E. G. Krug, L. L. Dahlberg, J. A. Mercy, A. B. Zwi & R. Lozano (Eds.), *World report on violence and health* (pp. 1-21). Geneva: World Health Organization.
- Forman, S. G., Olin, S. S., Hoagwood, K. E., Crowe, M., & Saka, N. (2009). Evidence-Based Interventions in Schools: Developers' Views of Implementation Barriers and Facilitators. *School Mental Health*, *1*(1), 26–36. doi: 10.1007/s12310-008-9002-5
- Galbraith, J. S. (2004). An examination of the re-invention process of a health promotion program: The changes and evolution of "Focus on Kids" HIV prevention program. (Doctor of Philosophy), University of Maryland, College Park, MD. Retrieved from http://drum.lib.umd.edu/handle/1903/1392
- Glenton, C., Colvin, C. J., Carlsen, B., Swartz, A., Lewin, S., Noyes, J., & Rashidian, A. (2013). Barriers and facilitators to the implementation of lay health worker programmes to improve access to maternal and child health: qualitative evidence synthesis. *Cochrane Database of Systematic Reviews*(10). doi: 10.1002/14651858.Cd010414.Pub2
- Guerra, N. (2005). Youth Violence Prevention. Community Based Crime and Violence Prevention in Urban Latin America and the Caribbean. Washington, DC: The World Bank.
- Hahn, R., Fuqua-Whitley, D., Wethington, H., Lowy, J., Crosby, A., Fullilove, M., . . . Task Force on Community Preventive Services. (2007). Effectiveness of universal school-based programs to prevent violent and aggressive Behavior A systematic review. *American Journal of Preventive Medicine*, 33(2), S114-S129. doi: 10.1016/j.amepre.2007.04.012

- Hahn, R. A., Bilukha, O., Lowy, J., Crosby, A., Fullilove, M. T., Liberman, A., . . . Task Force on Community Preventive Services. (2005). The effectiveness of therapeutic foster care for the prevention of violence A systematic review. *American Journal of Preventive Medicine*, 28(2), 72-90. doi: 10.1016/j.ampre.2004.10.007
- Heinemann, A., & Verner, D. (2006). *Crime And Violence In Development : A Literature Review Of Latin America And The Caribbean*: The World Bank.
- Imbusch, P., Misse, M., & Carrion, F. (2011). Violence Research in Latin America and the Caribbean: A Literature Review. *International Journal of Conflict and Violence*, *5*(1), 88-154.
- Kelly, M., Morgan, A., Ellis, S., Younger, T., Huntley, J., & Swann, C. (2010). Evidence based public health: A review of the experience of the National Institute of Health and Clinical Excellence (NICE) of developing public health guidance in England. *Social Science & Medicine, 71*(6), 1056-1062. doi: 10.1016/j.socscimed.2010.06.032
- Kincaid, D., Childs, K., Blase, K. A., & Wallace, F. (2007). Identifying barriers and facilitators in implementing schoolwide positive behavior support. *Journal of Positive Behavior Interventions*, *9*(3), 174-184. doi: Doi 10.1177/10983007070090030501
- Kingdon, G. G., Littlem, A., Aslam, M., Rawal, S., Moe, T., Patrinos, H., . . . Sharma, S. K. (2014). *A rigorous review of the political economy of education systems in developing countries. Final Report. Education Rigorous Literature Review*: Department for International Development.
- Kok, M. O., Vaandrager, L., Bal, R., & Schuit, J. (2012). Practitioner opinions on health promotion interventions that work: Opening the 'black box' of a linear evidence-based approach. *Social Science & Medicine*, 74(5), 715-723. doi: 10.1016/j.socscimed.2011.11.021
- Kremer, K. P., Maynard, B. R., Polanin, J. R., Vaughn, M. G., & Sarteschi, C. M. (2015). Effects of After-School Programs with At-Risk Youth on Attendance and Externalizing Behaviors: A Systematic Review and Meta-Analysis. *Journal of Youth and Adolescence, 44*(3), 616-636. doi: 10.1007/s10964-014-0226-4
- Limbos, M. A., Chan, L. S., Warf, C., Schneir, A., Iverson, E., Shekelle, P., & Kipke, M. D. (2007). Effectiveness of interventions to prevent youth violence a systematic review. *American Journal of Preventive Medicine*, 33(1), 65-74. doi: 10.1016/j.amepre.2007.02.045
- Matjasko, J. L., Vivolo-Kantor, A. M., Massetti, G. M., Holland, K. M., Holt, M. K., & Dela Cruz, J. (2012). A systematic meta-review of evaluations of youth violence prevention programs: Common and divergent findings from 25 years of meta-analyses and systematic reviews. *Aggression and Violent Behavior*, *17*(6), 540-552. doi: 10.1016/j.avb.2012.06.006
- Maughan, D. R., Christiansen, E., Jenson, W. R., Olympia, D., & Clark, E. (2005). Behavioral parent training as a treatment for externalizing behaviors and disruptive behavior disorders: A meta-analysis. *School Psychology Review*, *34*(3), 267-286.
- Medan, M. (2011). Sociabilidad juvenil masculina y riesgo: Discrepancias y acuerdos entre un programa de prevención del delito juvenil y sus beneficiarios. [Sociability male youth risk: Disputes and agreements between a crime prevention program for youth and their beneficiaries]. *Ultima década*, 19(35), 61-87. doi: 10.4067/s0718-22362011000200004
- Medan, M. (2012). ¿"Proyecto de vida"? tensiones en un programa de prevención del delito juvenil ["A life's project"? tensions in a youth crime prevention program]. Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud, 10(1), 79-91.
- Medan, M. (2013). Prevencion del delito y construccion de feminidades juveniles [Crime prevention and youthful femininity construction]. *Revista de Ciencias Sociales, 2*(140), 73-83.
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & ., P. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Bmj-British Medical Journal*, 339. doi: 10.1136/bmj.b2535
- Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M.,, P.-P. G. (2015).

 Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P)
 2015 statement. *Syst Rev, 4*, 1. doi: 10.1186/2046-4053-4-1

- Moser, C., & McIlwaine, C. (2006). Latin American urban violence as a development concern: Towards a framework for violence reduction. *World Development, 34*(1), 89-112. doi: 10.1016/j.worlddev.2005.07.012
- Moser, C., & van Bronkhorst, B. (1999). *Youth Violence in Latin America and the Caribbean: Costs, Causes, and Interventions* Washington, DC: The World Bank.
- Mytton, J., DiGuiseppi, C., Gough, D., Taylor, R., & Logan, S. (2006). School-based secondary prevention programmes for preventing violence. *Cochrane Database of Systematic Reviews*(3). doi: 10.1002/14651858.CD004606.pub2
- Mytton, J. A., DiGuiseppi, C., Gough, D. A., Taylor, R. S., & Logan, S. (2002). School-based violence prevention programs Systematic review of sedondary prevention trials. *Archives of Pediatrics & Adolescent Medicine*, *156*(8), 752-762.
- Office of the Surgeon General (US), National Center for Injury Prevention and Control (US), National Institute of Mental Health (US), & Center for Mental Health Services (US). (2001). Chapter 1 Introduction Youth Violence: A Report of the Surgeon General. Rockville (MD): Office of the Surgeon General.
- Oliver, R., Wehby, J., & Daniel, J. (2011). Teacher classroom management practices: Effects on disruptive or aggressive student behavior. *Campbell Systematic Reviews*(4). doi: 10.4073/csr.2011.4
- Peetz, P. (2011). Youth Violence in Central America: Discourses and Policies. *Youth & Society, 43*(4), 1459-1498. doi: 10.1177/0044118x10384236
- Perel, P., Casas, J. P., Ortiz, Z., & Miranda, J. J. (2006). Noncommunicable diseases and injuries in Latin America and the Caribbean: Time for action. *Plos Medicine*, *3*(9), 1448-1451. doi: 10.1371/journal.pmed.0030344
- Petrosino, A., Turpin-Petrosino, C., Hollis-Peel, M. E., & Lavenberg, J. G. (2013). 'Scared Straight' and other juvenile awareness programs for preventing juvenile delinquency: A systematic review. *Campbell Systematic Reviews*, *5*. doi: 10.4073/csr.2013.5
- Piquero, A. R., Farrington, D., Welsh, B., Tremblay, R., & Jennings, W. G. (2008). Effects of early family/parenting programs on antisocial behavior and delinquency. *Campbell Systematic Reviews*, 11.
- Schnell, C. E. (2012). Community-Based Crime and Violence Prevention Project A Project Systematization El Salvador, 2008–2012. El Salvador: USAID / RTI International.
- The SURE Collaboration. (2011). SURE Guides for Preparing and Using Evidence-Based Policy Briefs. Version 2.1 [updated November 2011]. Retrieved June 03 2015, from http://global.evipnet.org/SURE-Guides/
- Tolan, P., Henry, D., Schoeny, M., & Bass, A. (2008). Mentoring interventions to affect juvenile delinquency and associated problems. *Campbell Systematic Reviews* (16).
- Tong, A., Flemming, K., McInnes, E., Oliver, S., & Craig, J. (2012). Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *Bmc Medical Research Methodology, 12*. doi: 10.1186/1471-2288-12-181
- UNODC. (2014). *Global Study on Homicide 2013. Trends, context, data* (pp. 163). Retrieved from https://www.unodc.org/documents/gsh/pdfs/2014 GLOBAL HOMICIDE BOOK web.pdf
- Uy, M. (2012). Venezuela's National Music Education Program El Sistema: Its Interactions with Society and its Participants' Engagement in Praxis. 4(1).
- Weinstein, M. B., Fuller, K., Mulrooney, T., & Koch, G. (2014). The benefits of recreational programming on juvenile crime reduction: A review of literature and data (pp. 344).

 Retrieved from https://www.gocolumbiamo.com/ParksandRec/About_Us/documents/nrpareport_juvenile_crime_reduction.pdf
- Willman, A., & Makisaka, M. (2010). Interpersonal Violence Prevention: A Review of the Evidence and Emerging Lessons. Background paper, 2011 World Development Report Retrieved from http://siteresources.worldbank.org/EXTWDR2011/Resources/6406082-1283882418764/WDR Background Paper Willman.pdf

- Wilson, S. J., & Lipsey, M. W. (2000). Wilderness challenge programs for delinquent youth: a metaanalysis of outcome evaluations. *Evaluation and Program Planning, 23*(1), 1-12. doi: Doi 10.1016/S0149-7189(99)00040-3
- Wilson, S. J., & Lipsey, M. W. (2007). School-based interventions for aggressive and disruptive behavior Update of a meta-analysis. *American Journal of Preventive Medicine, 33*(2), S130-S143. doi: 10.1016/j.amepre.2007.04.011