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Adaptation and Implementation of a Science-Based Prevention System in Colombia: Challenges and Achievements

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Abstract

During the last 2 years, the Colombian government and the Nuevos Rumbos Corporation have been implementing an adapted version of the Communities That Care (CTC) prevention system, called *Comunidades Que se Cuidan* (CQC) in Spanish, for use in Colombia. This brief report presents the process of implementing CQC and identifies some of the main challenges and achievements of implementing the system in eight communities in Colombia. Preliminary results of a pilot study of CQC implementation in Colombia show that prevention system development, including a focus on measuring community risk and protection, can be established successfully in Latin American communities despite a lack of rigorously tested prevention programs and strategies. Moreover, mobilizing community coalitions toward science-based prevention, with a focus on examining local risk and protective factor data, can spur development and evaluation of prevention efforts in Latin America.

Keywords

prevention systems; drug abuse; *Comunidades Que se Cuidan*; Communities That Care; coalitions

In some regions of Colombia, rates of youth violence and drug use have been escalating throughout much of the past decade. For example, rates of licit and illicit drug use among

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youth have been rising (Ministry of Health and Social Protection [MSPS] & Inter-American Drug Abuse Control Commission, 2006; MSPS & National Office of Drugs [DNE], 2009), with marked increases in use among female and urban youth (Pérez Gómez & Scoppettaa, 2009). Colombia has one of the highest rates of adolescent alcohol abuse in South America, with a lifetime incidence rate of 89%, past-year alcohol use rate of 67%, 30-day use rate of 28%, and last-week rate of 13% for youth under age 18 (Pérez Gómez & Scoppettaa, 2009). In 2008, the national survey on drug abuse among the general population aged 12 to 65 (MSPS, Ministry of Education [MEN], & Ministry of the Interior and Justice [MIJ], 2012) revealed that 300,000 people were in need of treatment for drug abuse; and in 2011 a large survey was carried out among 93,000 students under age 18 (MSPS, MEN, & MIJ, 2012) that placed Colombia in a middle rank among the countries in the hemisphere regarding the use of drugs like marihuana, cocaine, and inhalants. Rates of juvenile delinquency and youth violence have kept pace with escalating rates of adolescent drug use (Colombian Institute on Family Welfare, 2012).

In 2011, the Colombian Ministry of Public Health and Social Protection contracted with the Nuevos Rumbos Corporation (NRC), a non-governmental organization located in Bogotá, Colombia, dedicated to drug and violence prevention and treatment research (see: www.nuevosrumbos.org), to initiate a community-based prevention initiative, *Comunidades Que Se Cuidan* (CQC), which was modeled after the Communities That Care (CTC) prevention system (Hawkins et al., 2008).

Communities That Care is a manualized community prevention system that uses a public health methodology to mobilize communities to adopt a science-based approach to preventing youth problem behaviors such as youth violence, delinquency, substance use, and teenage pregnancy (see: www.communitiesthatcare.net). Through surveys of empirically identified youth risk/protective factors and health/behavior problems, CTC helps communities determine the most pressing needs among their youth, and then guides the implementation of evidence-based prevention programs and strategies that target prioritized needs. CTC is implemented by a coalition of community members through a series of five phases: (1) *Getting Started*: An introduction of the CTC process to community stakeholders, recruitment of community leaders, and assessment of community readiness for collaborative prevention; (2) *Getting Organized*: Formation of the community coalition board, securing commitment to the CTC process, and forming a diverse coalition of community members and leaders; (3) *Developing a Profile*: Using epidemiological data to assess risk and protective factors and antisocial behaviors via the use of the Communities That Care Youth Survey, and prioritizing risk and protective factors for intervention; (4) *Creating a Plan*: Selecting evidence-based prevention programs and strategies that align with a community's prioritized needs; and (5) *Implementation and Evaluation*: Implementing the selected interventions with fidelity, and monitoring and evaluating the process over time.

CTC relies on a community coordinator to lead a community coalition of local stakeholders who are interested in youth well-being in their community. Throughout the five phases of CTC implementation, key leaders and coalition board members go through six trainings in the fundamentals of prevention science and operational aspects of community prevention coalition functioning, evidence-based prevention program and strategy selection and

implementation, and evaluation of program and system implementation (Quinby et al., 2008). In line with the call to strive for an optimal balance between program fidelity and appropriate cultural adaptation (Castro, Barrera, & Martinez, 2004), this brief report describes the process of adapting CTC into CQC for use in Colombia, and the challenges and successes in implementing CQC as part of a pilot demonstration project in eight small communities in Colombia.

Method

The NRC translated all CTC materials (e.g., manuals, presentations, and surveys) into Spanish, introducing minimal modifications where necessary in order to avoid misinterpretation of prevention science concepts and constructs used in the CTC prevention system (Peña, 2007). These changes were reviewed with the Social Development Research Group, School of Social Work, University of Washington (SDRG) to maintain adherence with the original development of the system. An abbreviated Spanish-language version of the CTC Youth Survey (Arthur et al., 2007; Arthur, Hawkins, Pollard, Catalano, & Baglioni, 2002) was created, which measured a subset of risk factors in community, school, family, and peer/individual domains, and antisocial behavior outcomes. Midway through the 1st year of the project, an advisory panel of Colombian university researchers, prevention advocates, and nongovernmental officials was convened to review the survey for cultural and linguistic appropriateness of survey measures used in the project and to recommend additional culturally relevant adaptations. The project was ethically evaluated and approved by an ad hoc Institutional Review Board in Colombia that assessed the ethical conduct of the study.

Two bilingual CQC “trainers” went to the U.S. and shadowed a Master CTC Trainer for 2 weeks as she trained and implemented CTC in several different communities. All CTC trainings (i.e., Key Leader Orientation, Community Board Orientation, Community Assessment Training, Community Resource Assessment Training, Community Plan Training, and Community Plan Implementation Training) were translated into Spanish.

A few adaptations to the original CTC model were made from the onset of the pilot study in Colombia. For example, the focus of the project was limited to only two outcome behaviors: drug use and delinquency. The number of risk and protective factors was limited to expedite the student survey process. And the timeline for implementation activities and trainings had to be accelerated to comply with contractual obligations with funders.

During Phase 1 of CQC implementation in 2012 and 2013, NRC assessed the level of readiness in the community for undertaking the CQC process using measures adapted from the Community Key Informant Survey (Arthur, Glaser, & Hawkins, 2005). Local community leaders and key stakeholders were contacted and informed about the project and an initial introductory meeting was scheduled between NRC and community leaders. Communities ($n = 2$) not meeting a satisfactory level of commitment and readiness were excluded from the pilot study. The eight communities that met the criteria for CQC represented geographically diverse regions of the country. Chosen communities were relatively small, self-contained areas (average population of approximately 30,000 inhabitants each), five in the Department

of Quindío, and three near the capital, Bogotá. The five communities in Quindío had received what in Colombia is called an *early alert*—an urgent call to governmental authorities (i.e., police, child welfare, Ministry of Health) by a competent authority to intervene when situations of social conflict reach high levels. The three other communities had a reputation with local or federal authorities for high use of alcohol and other illicit substances among adolescents.

During Phase 2 of CQC implementation, NRC reached out to existing community substance use prevention committees as a starting point for building the CQC community prevention coalitions. CQC prevention coalitions were relatively small, composed of not more than 20 members each; therefore, the coalitions were kept as whole groups and not subdivided into various workgroups as is done typically in U.S. implementations of CTC.

In Phase 3, the adapted version of the CTC Youth Survey was administered to students in their schools as part of their normal curricular activities. The Colombian Institute of Family Welfare and the Department of Education facilitated access to communities' schools by contacting the schools on behalf of NRC and describing the study to them. All students who were in the 6th through 11th grade were administered a survey. (Note: Grade 11 is the highest grade of high school in Colombia). NRC, in collaboration with SDRG, created a report containing data on risk factors, protective factors, and the prevalence of drug use in each community. Community reports were shared and explained with coalition members as part of the CQC trainings.

With this information, communities were ready to begin Phase 4. During this phase, NRC shared with the coalitions a menu of prevention programs that had been compiled earlier by the research team. The menu provided information on 15 existing programs in Colombia, only one of which had been evaluated rigorously. Seven other programs had some sort of monitoring (e.g., baseline and follow-up data, or provided some information on evaluation tools), and seven other programs/strategies had no evaluation at all. The coalitions also implemented other preventive interventions that could, along with the selected programs, respond to the priority risk and protective factors identified in Phase 3. Examples of these included: (a) brief (2-hour) training sessions of prevention science concepts (e.g., risk and protective factors) for community leaders, parents, and teachers to act as boosters to regular CQC trainings; (b) increased police participation in community and school prevention initiatives; (c) promoting recreation activities for youth and monitoring the use of their free time; (d) motivational interviewing during screening procedures using the CRAFFT/CARLOS screening tool (Pérez Gómez, Trujillo, & Forns Santacana, 2011); (e) public information campaigns using brochures and booklets prepared especially for parents and families, with prevention tips on identifying and managing specific situations in the home; (f) presenting a recorded stand-up comedy routine with an alcohol prevention message administered to 10th- and 11th-grade students in schools; and (g) "mystery shopper" strategies where local authorities and coalitions make an agreement with alcohol sales outlets to not sell alcohol to minors; if alcohol is sold to the minor mystery shopper, the community coalition can complain or report the outlet to authorities.

In Phase 5, Nuevos Rumbos maintained contact with CQC prevention coalitions in all communities, providing technical assistance on CQC implementation and the science-based aspects of CQC as needed. Usually, ongoing contact and technical assistance consisted of 2-hour meetings every other week where community financial resources were identified for implementing the action plan, and decisions were made for monitoring the implementation and evaluating chosen prevention programs and strategies.

Results

CQC Prevention Coalitions

Implementation of the first four Phases of CQC in the eight communities took an average of 7 months. On average, community prevention coalitions consisted of 12 members representing at least nine different sectors of the community (health, education, local government, private business, child/family welfare, recreation/sports, police, religious, and other community sectors). All coalition members resided in the communities that they represented.

CQC Youth Surveys

In total, 33,790 students completed the survey in the first wave of data collection (i.e., prior to CQC implementation). Just over half (51.7%) of students were female. Numbers (percentages) of students across the six grades were: $n = 6,772$ (20.4%) in 6th grade, $n = 6,349$ (19.1%) in 7th grade, $n = 6,037$ (17.9%) in 8th grade, $n = 5,203$ (15.6%) in 9th grade, $n = 4,899$ (14.5%) in 10th grade, and $n = 3,991$ (12.0%) in 11th grade. The most salient risk factors identified in these communities were: (a) *Availability of Drugs in the Community*, (b) *Laws and Norms in Favor of Drug Use*, (c) *Low Commitment to School*, and (d) *Low Perception of Risk Regarding Drug Use*. Lifetime, past-year, and past-30-day prevalence rates were 75.3%, 72.8%, and 41.2% for alcohol use; 31.7%, 26.0%, and 12.6% for tobacco use; and 14.8%, 13.1%, and 6.8% for marijuana use, respectively. These rates tended to be somewhat higher than comparative prevalence rates of use based on national survey data, indicating the need for prevention services and, hence, the inclusion of these communities in the pilot study.

In 2014, a second wave of data collection was completed in the first Colombian community to have implemented all five phases of the CQC process. This “post-implementation” wave of data added another 2,000 6th- through 11th-grade students to the total number of youth sampled in the pilot study. Although nonexperimental, comparisons of pre- and post-implementation prevalence rates from the CQC Youth Surveys have demonstrated notable reductions in 30-day, past-year, and lifetime alcohol, marijuana, cigarette, and hard drug use for youth in this community.

CQC Implementation: Challenges and Achievements

A primary challenge to CQC implementation in Colombia was the limited understanding of the concept of “prevention” by coalition and community members. In all cases, communities tended to think that this concept referred to conferences or workshops within schools, perhaps with some parental participation. A significant accomplishment, therefore, was to be

able to provide trainings on what prevention really means and the scope of what prevention initiatives can and should do.

Access to local authorities and governmental officials tended to be difficult. The tendency was to delegate lower level personnel to participate in coalitions or committees, which rendered decision making impossible. It was crucial to try to obtain and maintain direct contact with decision makers who had a certain level of authority within the community (e.g., the mayor), inviting them to participate, or asking that they delegate a single person that has decision-making power and who had the requirement to attend regular coalition meetings. In the U.S., CTC coalition members (not including the community prevention coordinator) are typically all volunteers. This was not possible in Colombia, where local residents were volunteers, but local governmental authorities had to designate public employees as members of the community prevention coalitions with mandatory participation as part of their regular work functions.

After coalition members were chosen and key leaders were identified, it was very difficult to organize trainings with adequate attendance. It was necessary to reach specific agreements within each community regarding the scheduling of trainings, where some coalitions preferred to concentrate trainings in a short period of time, while others wanted to spread them out over time. Communities demonstrated an initial reluctance when they realized they had to make financial investments in order to implement and execute the chosen prevention programs and strategies. Communities were alerted from the start that they had to prepare for this, and that they should include resources for programming within their local budgets.

A key concept for CQC was the readiness of the community for prevention system development and change. During the initial contacts between NRC staff and community members, much interest in prevention initiatives was expressed but it often evaporated quickly. Based on our experience in Colombia, we emphasize that a rigorous assessment of community readiness be conducted prior to initiating the implementation process in order to assess a community's predisposition for sustained prevention system transformation.

In our experience working with communities in the CQC pilot study, commitments were often not met. For example, members were often not punctual, there was high turnover in meeting attendance (i.e., the same people did not attend all meetings and trainings), and unfortunately it was not unusual for some members to disrespect others' ideas. Proper meeting decorum and rules had to be emphasized throughout the trainings. It was often the case that internal coalition conflicts, or conflicts of interest, only became apparent *after* the first meetings. These conflicts had to be dealt with quickly, lest they endanger the entire CQC process. Many communities lacked historical or administrative records that are used in the assessment of community resources in Phase 1 of CTC implementation, such as juvenile delinquency records or objective data on drug use and incidents related to alcohol use. Procedures for identifying and reviewing existing data were emphasized throughout the early stages of CQC implementation.

Despite these challenges, several positive achievements were obtained. For example, all pilot communities decided to continue with CQC after pilot funding ended, some of them

financed from their own local funds (instead of asking for national funding). Additionally, the Governor of the Department of Cundinamarca, learning of the success of the pilot study, contracted with the NRC to implement CQC in 10 additional communities in that Department.

Discussion

Preliminary results of our pilot implementation of CQC in Colombia show it to be a highly promising prevention system for Colombia, and possibly for other Latin American countries. Success of the system was evidenced by full implementation of Phases 1 through 4, and selection and implementation of best-available evidence-based programs and strategies in Phase 5. Although development and implementation of evidence-based preventive interventions are in their infancy in Colombia (as in many middle- and lower income countries), the experience in Colombia has shown that implementation of the first four phases of CQC is able to consolidate community processes that no other prevention system has been able to achieve; namely, solidarity, awareness, and responsibility for the future of communities' youth constituencies. As science-based prevention systems, both the original CTC and the CQC adaptation rely on valid and comparable epidemiologic assessments of risk, protection, and health and behavior outcomes in communities' youth populations; this is essential to accurately assess prevention needs and monitor progress. Despite our success in achieving the pilot study's interim goals, more work and further research is needed to examine full implementation fidelity of CQC and its adherence to fundamental tenets of the CTC model. Next steps for CQC implementation in Colombia include: (a) sustaining implementation in existing CQC communities through a continuous process of monitoring and evaluation using established CTC implementation monitoring tools (e.g., the CTC Milestones and Benchmarks Implementation Tool, and the Community Key Informant Survey), (b) starting a new training cycle for those communities completing Phase 5, (c) collecting new waves of CQC Youth Survey data in all the participating schools, and (d) further analysis of risk and protective factor data in order to calculate more precise and nationally representative levels of youth at elevated risk and depressed protection.

As in any cross-national adaptation of an intervention or service-delivery system, certain limitations exist. For example: (a) high rates of school dropout might call for non-school-based assessments of youth risk in communities; (b) to reduce the burden on students in the pilot study, not all risk factors asked in the U.S.-based version of the survey were included in the CQC survey; (c) new risk factors not currently asked in current versions of student surveys may exist in some Latin American countries and regions and, conversely, some U.S.-based risk factors may not be as salient in Latin American countries and regions; and (d) the lack of rigorously evaluated prevention programs and strategies in Latin America seriously hinders the progress of tailoring interventions to specific needs. Despite these limitations, we believe that a risk and protective factor approach to prevention, rooted in 30 years of research and evaluation, is the primary way to make meaningful and lasting impact in preventing youth behavioral problems.

Moreover, we believe that developing a prevention system for local planning and delivery of prevention services in middle- and lower income countries in Latin America is a *prerequisite*

for developing and establishing a menu of tested-effective prevention programs. This notion runs counter to the U.S. experience where implementation of already-existing evidence-based prevention programs with fidelity has been a serious challenge (see e.g., Ringwalt et al., 2003; 2002). Our experience adapting and implementing CQC in Colombia leaves us with the conclusion that development/adaptation/implementation of linguistic, cultural, and risk-appropriate prevention programs will be catalyzed, facilitated, and sustained by grassroots community-based efforts to understand and apply a science-based approach to the prevention of adolescent antisocial behaviors.

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