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CICAD HEMISPHERIC GUIDELINES ON SCHOOL-BASED PREVENTION

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I. BACKGROUND

1. The Inter-American Program of Quito OAS/CICAD/CIECC¹: Comprehensive education to prevent drug abuse recognizes the need for the definition of a clear policy, rules, and regulations on how to handle drug abusers within the school system: responsibilities of teachers, students, parents, and school administrators in dealing with the problem.

It also encourages policy framing and application in order to include prevention activities in the curricula of the formal education system in the region.

2. The Anti-Drug Strategy in the Hemisphere CICAD/OAS² addresses the drug problem from a global and multi-disciplinary perspective. All countries of the hemisphere recognize that they share a responsibility for ensuring that a comprehensive and balanced approach is taken on all aspects of the phenomenon, taking into account their available capabilities and resources. The measures suggested will take cognizance of the socioeconomic and cultural contexts and be carried out in strict observance of the internal legal order of the countries of the hemisphere.

In the Strategy the countries of the hemisphere recognize drug abuse as a grave threat not only to the life and health of the user, but also to the community in general. The way in which the problem has evolved demonstrates that demand reduction must be a key component of policies intended to address the problem.

- **3.** The Action plan for the implementation of the Anti-Drug Strategy in the Hemisphere proposes, at technical meetings held by CICAD on the subject, to promote the preparation of clear guidelines outlining those aspects and factors that, from a conceptual and methodological standpoint, should be included in a national prevention program, with a view to achieving standardization at the inter-American level on the basis of successful experiences carried out thus far.³
- **4. Multilateral Evaluation Mechanism** (MEM)⁴. The Hemispheric Report of the Second Evaluation Round 2001-2002 has as its first recommendation to "develop, in the short term, training and prevention programs for primary schools (teachers and pupils) in order to prevent children from starting to use alcohol and tobacco and other psychoactive substances".

It also recommends evaluation of prevention and treatment programs to determine which are the most effective and have the greatest impact on the beneficiary population.

¹ Inter-American Program of Quito: Comprehensive education to prevent drug abuse. Items 2 and 4 of the Workshop Agenda contained in that document.

² Anti-Drug Strategy in the Hemisphere of the Inter-American Drug Abuse Control Commission (CICAD), par. 11 – Demand Reduction

³ Action plan for the implementation of the Anti-Drug Strategy in the Hemisphere of the Inter-American Drug Abuse Control Commission (CICAD), par. 6 – Demand Reduction

⁴ Hemispheric Report 2001-2002. Evaluation of Progress in Drug Control. Multilateral Evaluation Mechanism (MEM), Inter-American Drug Abuse Control Commission (CICAD). Chapter II, Section A, p.4.

The failure of a number of countries to develop policies for training educators at every level (primary, secondary and university) in addiction prevention means that this task is left to a small number of specialists, which limits its effectiveness.

The MEM says that less than one quarter of the countries in the hemisphere report having initiated drug abuse prevention programs in primary schools and only a few report that they are studying the effectiveness of such programs.

In the final report of the **Thirty-Fourth Regular Session of CICAD in November 2003 and the Thirty-Fifth Regular Session in April 2004** it was decided that, in the framework of the work plans of the Groups of Experts to be carried out in 2004-2005, efforts in the area of demand reduction should give particular attention to strengthening prevention mechanisms in the regional education system.

5. The Fifth Meeting of Experts in Demand Reduction in October 2003 recommended the preparation of Guidelines for a Plan for School-based Prevention utilizing a combination of strategies of proven effectiveness: health promotion, healthy lifestyles, developing life skills, and substance abuse prevention.

The school plays a pivotal role in the dissemination of values, attitudes and behavior that contribute to the integral development of children and youth in preparation for encounters with risks in social settings.

The possibility exists in the school context to implement a continuous, systematic process that not only encompasses students, but can also involve peers and families, in order to foster knowledge and behavior based on healthy, self-protective, and drug-free lifestyles.

The prime core objective of school-based prevention should be to broaden national coverage; in other words, all school-age children and youth should participate in training programs on drug abuse prevention and life skills.

II. POLICY FRAMEWORK

- 1. Improve or promote the legal framework in each country for development of a national school-based prevention strategy.
- 2. Recommend that governments recognize the importance of, value, give priority to, and implement a national school-based prevention strategy.
- 3. Recommend that the school-based prevention strategy include, in the framework of the national plan, education programs at all levels (pre-school, primary, secondary and university) in a gradual, continuous and systematic process.
- 4. All programs implemented in the region should be research based.

- **5.** Develop a national school-based prevention policy for adoption at the regional, municipal, and local level, as well as at each education facility.
- 6. Encourage adoption of a Confiscation Law that allocates a portion of confiscated and seized assets to National Anti-Drug Committees, with a view to financing prevention programs.
- 7. Secure resources to enable all education facilities to implement programs for students, their families, and the education community at large.
- 8. The policy adopted at each facility should include programs and measures that encourage the development of attitudes, values and skills committed to healthy, anti-drug lifestyle.
- 9. Each local community, region, province and country should move forward with the development of a school-based prevention policy as part of the country's national education plan that is consistent with this strategy and ensures its sustainable implementation.
- 10. It is suggested that each education facility develop a policy to address this issue based on an analytical study; appoint a team of persons responsible; define rules and procedures; and implement prevention programs at every educational level for students, their families, and the education community at large.
- 11. Encourage corporate alliances between schools and local businesses, in order to sponsor local prevention programs.
- 12. The school-based prevention strategy should be carried out in coordination with the National Anti-Drug Committee (CND) and the Ministry of Education and Health in each country, which should be involved at every stage of the process, from program design and implementation, to follow-up, monitoring and evaluation.
- 13. Encourage strategic partnerships between government, NGOs, and civil society organizations in general, in order to broaden coverage of prevention activities for direct beneficiaries.
- 14. Promote participation of other sectors apart from school staff (*inter alia*, church organizations, public health offices, and community-based prevention agencies).
- 15. Recent studies and research have demonstrated that the use of coordinated multiple interventions is more effective than individual interventions. The use of coordinated multiple interventions requires the involvement of a variety of community-based organizations, agencies and professionals to provide support to schools so that the whole task is not left to teachers alone.
- 16. Cooperation agencies can be instrumental in the implementation of programs of exchange, research, coordination, and technical assistance among countries, as well as in harnessing the financial participation of international agencies, the business sector, private enterprise, and local and municipal government to ensure the sustainability of programs.

- 17. Include promotion of healthy lifestyles, development of life skills, and substance abuse prevention as cross-cutting core priorities or objectives of school curricula.
- 18. In addition to issues included as cross-cutting themes of basic education programs, there is a need also to implement specific programs during school hours. The reason for this is that it is sometimes thought that the task can be accomplished simply through cross-cutting inclusion, when in fact it has been shown that that alone is not sufficient.

III. CORE THEORETICAL FRAMEWORK

LEVELS OF PREVENTION

- 1) Prevention programs are categorized by a new series of definitions adopted in the area of prevention, which classify them according to target group. Specifically, they are *universal programs, selective programs, and indicated programs*.
 - a) Universal programs target the general population, such as all students in a school.
 - b) **Selective programs** target at-risk groups or subgroups of the general population, such as children of drug-users or poor school achievers.
 - c) **Indicated programs** are designed for people who are already experimenting with drugs or who exhibit other risk-related behaviors.
- 2) Programs should be consistent with the stage of development. The comprehensive approach combines drug abuse with other health-related matters through a blend of universal, selective and indicated programs.
- 3) Another way to categorize programs could be according to target group vulnerability levels. Certain other factors, including age, gender, community, environment, culture, income segment, can also help to determine what type of intervention to adopt.

PRINCIPLES OF SCHOOL-BASED PREVENTION

- 1. Programs should be designed to reduce risk factors and strengthen protective factors (Risk factors are circumstances that increase the possibility drug use and protective factors lower the possibility of drug use and other high-risk behavior).
- 2. It is important for the contents of prevention program to address legal substances (alcohol, tobacco and medicinal drugs) as well as illicit drugs.
- 3. School-based prevention programs should include components to build socio-affective skills and positive social competencies that reinforce rejection of drug abuse.

- 4. Interactive and participatory methods should be used in the context of horizontal teacher-student relationships to create climates of trust.
- 5. Programs should target the whole education community: students, teachers, families, and administrative staff.
- 6. They should be geared to the particular conditions of the community where the school is located, so that activities to strengthen protective factors are commensurate with the risk factors that exist in that setting.
- 7. Include selective and indicated programs for groups of at-risk students and potential drop-outs, so as to be able to implement early drug abuse detection strategies that target young people who have already started to use drugs.
- 8. Programs should be appropriate to age group, gender and educational level. In parallel there should ongoing training for teachers and prevention agents.
- 9. Programs should be permanent and designed for the long-term, starting at pre-school level and continuing through all subsequent education levels, with repeated interventions to reinforce the original prevention goals.
- 10. The greater the risk to the target group, the greater the intensity and urgency of the prevention effort needed.
- 11. Supplementary global cost-effective measures should also be adopted, such as tax increases on alcohol and tobacco, strict controls on prohibition of sale to minors, and a ban on their advertising.
- 12. Prevention programs that include media campaigns and policy reforms, such as new regulations that restrict access to alcohol, tobacco, and other drugs, are more effective when coupled with school- and family-based initiatives.
- 13. Prevention programs must strengthen standards against drug use in all spheres where prevention activities are carried out, such as the home, schools, the workplace, and the community.
- 14. Increase the quality and coverage of programs and ensure their sustainability over time.
- 15. Programs should be monitored and evaluated over the short, medium, and long terms.
- 16. The organizational capacity of institutions, be they government, schools, or local agencies, is pivotal for the successful implementation of comprehensive and coordinated programs. The capacities of this system would include aspects such as development of new policies, formal and informal cooperation mechanisms, and assignment of staff to assist inter-sectoral cooperation through capacity building, transfer of expertise, and coordinated responses to emerging problems and trends.

- 17. The aim is for each school to have a drug abuse prevention policy included as part of their educational plan; create a team of persons responsible; have trained teachers to address the issue; adopt standards and procedures for dealing with instances of drug use, as well as support and referral mechanisms; and determine universal, selective or indicated programs for all educational levels.
- 18. Develop mechanisms, strengthen networks and enhance available care resources for referral of early cases of drug use to specialized agencies.

RISK FACTORS AND PROTECTIVE FACTORS⁵

- 1. Studies carried out in recent years have yielded theories that explain the factors associated with drug use and the types of interrelation that can occur between them. Research has shown that certain factors are related to a greater or lesser degree with different forms of drug abuse, and each poses an obstacle to the psychological and social development of a person and has a different impact, depending on the stage of development, how the problem originated, and how it evolves. Several factors have also been identified that differentiate drug users from non-drug users. The factors connected with greater potential for drug use are termed "risk" factors, while those associated with the reduction in the potential for abuse are called "protective" factors.
- 2. For that reason, the factors that affect early development in the family are probably the most crucial:
 - 2.1. Dysfunctional families, presence of major family conflicts; parents' attitudes encourage or are associated with substance abuse; parents with mental illnesses.
 - 2.2. Ineffectiveness of parents, who are either too lax or too harsh in discipline, in particular with children with difficult temperaments or conduct disorders.
 - 2.3. Lack of affective ties.

3. Other risk factors have to do with the way in which children interact with others outside the family, in particular in the school, with companions, and in the community. Some of these factors are:

- 3.1. Inappropriate conduct; too shy or too aggressive in class.
- 3.2. Under achievement at school; scholastic failure
- 3.3. Inadequate social skills.

3.4. Association with companions who have behavioral problems or are disruptive, or peers who use drugs.

⁵ Preventing Drug Use Among Children and Adolescents: A Research Based Guide for Parents, Educators, and Community Leaders, Second Edition. (1997, Revised 2003), National Institute on Drug Abuse (NIDA).

- 3.5. Perceptions of approval of drug use in the school, among companions, and in community settings.
- 4. Risk factors have a cumulative effect: the greater the number of risk factors the higher the probability of initiation in drug use.
- 5. A number of protective factors have also been identified, which are not always the opposite of risk factors. Their repercussions also vary over the development process. The main protective factors include the following:
 - 5.1. Strong family ties;
 - 5.2. Vigilant parenting with clear rules of behavior in the family unit, and parent participation in the lives of their children;
 - 5.3. Success in school;
 - 5.4. Strong ties with pro-social institutions, such as the family, school, and religious organizations; and
 - 5.5. Adoption of conventional norms with respect to drug use.
- 6. Other factors —such as availability of drugs, trafficking patterns, and beliefs that drug use is tolerated on the whole— also influence the number of young people who start to use drugs.
- 7. Prevention programs should include development of life skills and techniques to resist pressure to take drugs when they are offered. Strengthen personal anti-drug attitudes and behavior, and strengthen assertive social communication skills, relationships with peers, personal effectiveness, and self-confidence.

8. Risk Factors at School

- Schools that foster competitiveness and individualism
- o Passiveness and dependence are encouraged
- Existence of relations of domination
- o Imbalanced and discriminatory relations are established
- Vertical teacher-student relations
- o Use of methodologies based on passive knowledge transmission
- o Study program takes precedence over the student body
- o Individual characteristics of each student are ignored
- o Production of compliant individuals is promoted
- o Confrontational relations among teaching staff
- The school is not receptive to other social systems.

9. Protective Factors at School

- o Existence of non-dominant integrating relations
- Cooperation and solidarity is fostered
- o Personal independence is promoted
- o Relations of equality are established
- o There is fluid two-way communication
- o The student body participates in the teaching learning process

- o Teachers are accessible and friendly
- o Teachers know and respect the interests of the students
- o An empathetic social climate is nurtured
- o Coordination and teamwork is promoted
- o Positive ties established between the school and community

MODEL PREVENTION PROGRAMS

- 1. The approach seeks the full and harmonious development of each student. Drug prevention is framed in this educational approach, in which drugs are an accepted reality that all students must face; an influence that entails a decision and, therefore, a value judgment; and a risk to integral development that must be tackled holistically.
- 2. There is an array of skills and competencies that students need in the course of the educational process and serve as tools to coexist better with others, avoid drug abuse, and confront the risks and influences in their environment that can alter their life plan. These skills contribute to healthy growth and all prevention programs should strengthen them.
 - 2.1. **Life Skills Model**: Seeks to strengthen psychosocial skills in children and adolescents that enable them to evolve in different the contexts and situations that arise in the course of life.
 - 2.2. **Encouragement of commitment to a healthy lifestyle**: promotes attitudes, habits and values consistent with a healthy lifestyle.
 - 2.3. **Risk- and protective-factor specific model**: seeks to strengthen protective factors associated with drug abuse and to diminish or avert risk factors connected principally with personal, family, cultural and contextual circumstances.
 - 2.4. **Social competency model**: builds up attitudes for acquitting oneself in different contexts and entails the acquisition of knowledge, aptitudes, and socio-affective skills.
 - 2.5. **Ecological model** (preventive youth culture): incorporates cultural variables from the micro and macro levels.
- 3. **Universal prevention programs** propose strengthening of values, attitudes, knowledge and skills that enable the child or youth to commit to healthy lifestyles and develop an anti-drug attitude, among which we may find:
 - o Self-care
 - o Development of independence
 - o Respect for self, others, and the community in general
 - o Resistance to peer pressure
 - o Abidance with the law as social protector
 - o Responsible and informed decision making
 - Development of identity
 - o Strengthening of self-esteem and positive self-image

- o Integral development
- o Life plan

It is important to combine clear and objective information on drugs and their consequences that attacks myths and tells children about the harm that substance abuse causes, in order to increase risk perception and reduce the possibilities of initiation in drug use.

Address within education social aspects that affect the formation of individuals and call for a more protective education.

It is advisable to strengthen development of these protective factors with attractive, specific programs that provide the educator with an instrument-cum-work tool to reinforce their preventive role.

Flexibility and ease of application are essential requirements for the viability of such programs.

Inclusion of the family is a core aspect of prevention. Close ties between family and school encourage awareness of and involvement in the development of children. Strengthening of personal and social skills, leading to the adoption of an active and responsible attitude. Tools for the preventive role.

IV. PRACTICAL ASPECTS

COMPONENTS OF A SCHOOL-BASED PREVENTION PROGRAM

A Prevention Program requires five essential, interdependent components.

- 1. Research
- 2. Preparation, Design and Validation of Educational Materials
- 3. Teacher Training
- 4. Evaluation
- 5. Dissemination and Communication
- **1. Research:** The program should be based on the results of research on the target group.
 - o Situation analysis to determine the target group.
 - o Prevalence of drug use
 - o Attitude of the population to drug use
 - o Factors that hinder or facilitate school-based prevention
 - o Results of past prevention programs.
 - o These results may be of assistance in the implementation of new programs.
 - o Availability of human and financial resources.
 - o Literacy rate among students and community agents
- **2. Preparation and Design of Educational Materials:** Materials should be appropriate to the target group (in terms of age, gender, culture, rural or urban location). Materials should be

prepared with the active participation of children or youth, and should be attractive, flexible, applicable without outside assistance, and offer participatory dynamics.

The contents of the document should be prepared with the participation of experts in the field. Furthermore, materials should be designed in participation with the local community familiar with reality of the target group.

2.1 Validation of materials:

Preparation of a validation plan on different levels:

- o Validation by experts to review contents (delivery of materials to professionals at universities, NGOs, or international experts)
- o Experts at the policy shaping level, National Anti-Drug Committees, Ministries of Education, and Ministries of Health.
- o Field validation with a sample of the target group (teachers, students). Consolidation of results to determine the success and applicability of the program.
- o Permanent review, analysis and feedback on materials.

3. Teacher training:

- 3.1. Determine a profile for the teacher-prevention agent:
 - o Teachers should participate voluntarily and be committed and available to act as continuous prevention agents under the program.
 - o Individual evaluation of teachers to determine the competencies they need to develop or strengthen before and during training. Teachers should be emotionally equipped to impart education on drugs and be role models for positive and healthy behavior; the same applies to other teachers in the school, as well as to directors and supervisors.

3.2. Nationwide ongoing training:

- o Include it in ministry training policies. Implement activities on different levels in order to sensitize educational institutions about the teacher-training process, so that training is included in the institution. Negotiation of training methods that are in character with the needs of the new curriculum.
- o In activities at the regional level appoint regional coordinators to ensure greater national coverage.
- o Periodic strengthening and feedback on training programs. Booster courses should be offered at least annually as part of an ongoing teacher-training process.
- o Make available a budget sufficient to ensure effective ongoing training, and negotiate the appropriate spaces, times and places dedicated to that end.
- O Definition of teacher incentive policies: keep available spaces for their ongoing training, including postgraduate programs. Provide training to several teachers in each institution, so as to ensure continuity in prevention, bearing in mind the high turnover of schoolteachers.
- Implement programs designed to develop or boost capacities at the undergraduate level, particularly for professionals in the area of teacher training, and include them as either standard or elective subjects in the study program, or as specialization courses in initial training.

- 3.3. Training for all prevention agents involved in imparting the program:
 - o Teachers
 - o Guidance counselors/teachers
 - Volunteer youth prevention agents
 - o Community agents
- 3.4. Separate sensitization activities on program implementation should be carried out for the whole education community:
 - o Parents' and representatives' associations
 - o Governing and academic boards of schools
 - o School nurses, counselors, and other school-based providers of supplementary services
 - Related institutions

4. Evaluation:

Evaluation is a flexible and stable information analysis process designed, through systematic and reliable procedures, to enhance efficient implementation of current activities and appropriate planning of future activities.

An evaluation should answer the following questions: What did the program accomplish? How was the program carried out? How much of the program did the participants receive? Was the program carried out as planned? Did the program produce the expected short- and long-term results?

• Types of Evaluation:

Evaluation of Processes:

Implementers: What are the tasks of the institutions and agents involved? Are they the most appropriate?

Recipients: Which target group receives the program?

Resources: With what resources and frequency?

o Evaluation of Results:

Fidelity: Was the program carried out as planned?

Intensity: How much of the program did the participants receive? (Number of participants, number of sessions, etc.)

Components: How does each component contribute to the desired results? Measured through specific indicators designed based on objectives, lessons learned, and quality of contents.

Evaluation of Impact

Short-term results: Awareness, knowledge, attitudes.

Medium-term results: Skills, change in behavior, reduction of risk

Long-term results: Change in the state of health, lower rates of use and abuse, lower costs in healthcare, quality of life

- o The evaluation should be planned and included from the start of the program.
- o Carry out an evaluation of processes and results with a longer-term impact using a pre-test and post-test designs applied to a control group and a test group.

- The evaluation should allow for modifications during the program implementation process.
 Through specific indicators designed based on objectives, lessons learned, and quality of contents.
- o It is important for the evaluation process to be implemented within the program itself; in other words, the evaluation should be intrinsic to the program. However, external evaluation should not be ruled out.
- o Carry out a rigorous and permanent systematic evaluation to identify progress in the process, results, and impact on individuals and the community. This will yield parameters to determine quality and provide feedback on program implementation.

5. Dissemination and communication strategies:

- o In order to encourage the spread of a culture of prevention it is necessary to disseminate and provide information on programs and activities to the different stakeholders in the education community, as well as to mass and alternative media outlets, in particular those that target children, youth and the family.
- o Implementation of varied leisure and cultural activities that enable community integration.
- o Include the media in the process of design, promotion and continuous evolution of the program; the media can help to design a dissemination plan on prevention.
- o Make use also of unions, school councils and teachers' associations, as well as parentteacher associations, to disseminate the program.
- o Involve young people in the design of activities so as to create an attitude favorable to prevention and multiplication among peers and the community at large.
- Creation of fixed and sustained figures and symbols that can represent programs and evoke over time the experiences, attitudes and knowledge acquired in prevention processes.
- One of the objectives of the dissemination component is to strengthen the program so that it becomes universally known and contributes to the formation of a culture of prevention.
- o Research has shown that the media can raise public awareness of the drug problem and prevent abuse in specific populations.

V. Some examples of research-based prevention programs

1. **Life Skills Training (LST)** (Gilbert Botvin, Ph.D). This classroom-based universal program for middle school students is designed to address a broad range of risk and protective factors that teaches general, personal and social competence skills, as well as information and skills to resist drugs. It consists of a three-year prevention studies program intended for middle or secondary school students. The program contains 15 classes in the first year; 10 booster

sessions in the second year; and five sessions in the third year. The LST program covers three main spheres: skills and information to resist drugs; self-management skills; and general social skills.

The LST program has been widely studied over the last 16 years. The results show that this prevention program can produce a 59% to 75% reduction (relative to control groups) in rates of tobacco, alcohol and marihuana use. Booster sessions can help to maintain the effects of the program. The data from long-term follow-up conducted on a random field sample of almost 6,000 students from 56 schools found considerably lower rates of tobacco, alcohol and marihuana use six years after the initial base line assessment. The prevalence of cigarette smoking, alcohol use, and marihuana use among LST students was 44% lower than for control students, while habitual (weekly) use of multiple drugs was 66% lower.

Web site: www.lifeskillstraining.com Institute for Prevention Research, Weill Medical College of Cornell University, New York.

2. The Lions-Quest Program. Lions-Quest programs, a priority project of the Lions Club International Foundation (LCIF) supports global primary prevention through 1) best practice and proven programming; 2) local and national Lion support; and, 3) available funding for replication and expansion.

Lions-Quest uses life skills and asset building in the three curricula designed to accompany students during each grade level from 5 to 18 years of age: **Skills for Growing, Skills for Adolescence,** and **Skills for Action**. The program strengthens protective factors in students and minimizes risk factors, creating a foundation for social-emotional learning (SEL). The program also promotes recognition of peer and media pressures towards use, in order to reinforce norms against drug use and focus on those attitudes and behaviors that can influence positive decisions regarding none use. Each unit focuses on specific skill building including self-confidence, self-discipline, interpersonal communication, decision-making, conflict resolution, resisting peer pressure, higher-order analysis, and goal setting.

The curriculum is built around a year long specific once-a-week class along with integrated activities in each subject area such as mathematics, social studies, language, health, etc. that help to reinforce weekly lessons. Additionally, the program is supplemented by community service and service-learning helping identify student leaders and empowering all students to see themselves as agents of change. Lions-Quest curricula have undergone extensive evaluation and been recommended as a SAMHSA Model Program by CSAP the substance abuse division of the U.S. Department of Health and Human Services. Students participating in the middle school program showed a 43% increase in their knowledge about the risks of alcohol and other drug use, and fewer Hispanic/Latin students engaged in lifetime alcohol use, and recent alcohol use and recent binge drinking than students in control schools. For more information contact: http://www.lions-quest.org

A program entitled *Leones Educando* (Lions Educating) based on this model has been implemented in Barranquilla, Colombia, as an integral part of the citizenship skills development component of the National Education Plan. The program was initially implemented in 26 pilot schools. For its second year the program is being expanded under an

agreement with the Ministry of Education that provides for its joint implementation and evaluation. For more information contact Programa Leones Educando, Asociación Nacional de los Clubes de Leones, Barranquilla, Colombia. Tel: (57-5) 370-1210; Fax: (57-5) 379-1829; E-mail: yolimadepaez@yahoo.es

3. Program "Trazando el Camino", Costa Rica.

Inter-institutional project implemented by the Institute on Alcoholism and Addiction (IAFA), the Ministry of Education, National Drug Council and the Costa Rican Institute on Drugs (ICD), initially in cooperation with the Pan American Health Organization (PAHO). The program is implemented with seventh-, eighth-, and ninth-grade student in all schools during the counseling hour and involves the entire education community. The program has three components: Developing life skills; Dispelling myths about drug use; and Information on drugs. The objectives are to provide students with the skills necessary to deal with situations of risk; promote health by fomenting positive attitudes toward its conservation; instill anti-drug attitudes; delay age of first use; encourage the critical capacity of students; and educate students in positive use of spare time. The program has been implemented at 60% of schools and it includes an impact and process evaluation.

4. Program "Aprendo a Valerme por mi mismo", IAFA, Costa Rica.

This is a life skills development program intended for fourth-, fifth-, and sixth-grade students. The program uses a constructivist model in which students learn to learn under an approach where they build up their own knowledge, which gives the lessons learned significance. It is a life skills learning process in which students learn for themselves and determine what measures to adopt in order to move forward. The program is implemented via two modalities: directly by IAFA employees; and through teachers trained as multiplier agents. It includes a qualitative and impact evaluation through pre- and post-tests to determine prevalence of drug use and life skills before and after the program. Participating in the program are 300 schools and 30,000 fourth-grade students; 30,000 students in fifth grade; and 30,000 students in sixth grade, who represent one-third of the students at those grades in the Costa Rica. IAFA Web site: http://www.netsalud.sa.cr/ms/ministe/iafa.htm

5. Multi-level school-based prevention program. CONACE-MINEDUC, Chile.

Pre-school "*En busca del Tesoro*": Early prevention program intended for pre-schoolers in formal and informal education contexts. The program is designed to strengthen values, attitudes, skills and behavior in pre-schoolers to help them to develop healthy lifestyles. The program uses learning methods based on real-life daily situations that closely resemble their personal lives, and includes materials for the educator, each child, and the family.

Primary schools "Marori y Tutibú": Early prevention program intended at children at first to fourth grade of primary school. This strategy offers a series of learning situations in which children can acquire competencies and skills to deal constructively and independently with their lives. In particular, it addresses situations of risk for drug use. It centers on five core preventive themes: identity, self-care, integral development, extension of sense of self, kindness to others.

Primary Schools "Quiero ser": This program, titled "I want to be," is designed for fifth through eighth graders. It understands prevention to be an integral educational process, centering on the individual him/herself, not only on drugs. It is oriented towards developing personal and social skills in the student, to prepare him or her to confront difficult situations and conflicts common to their age group. It is flexible, self-applied, and carried out in progressive sequence over four years, from fifth to eighth grade of primary schools. It integrates the child's family into activities, using the family as a tool for developing preventive activities, as well as generating a space for discussion about drugs within the home. During 2003, the program was implemented in 7,000 public and private educational institutions in the country. The program is available through CONACE for any private institutions interested in using the model.

Secondary schools "Yo Decido" Prevention program against alcohol and drug use for students at first to fourth grade of secondary school. Its core objectives are acquisition of knowledge for decision making on alcohol/drug use; development of protective skills to resist substance use; strengthening of community ties. **Web site:** www.conacedrogas.cl

6. **Program "Somos Triunfadores"**, **CONAPRED - Panama.** The objective of the prevention strategy implemented in Panama is to strengthen school-based prevention through integration of all the sectors concerned and to unify the criteria for preventive education with the school population. The goal is to introduce preventive education themes in school curricula that center on drug abuse and other related issues. It is a national program that approaches prevention as a means to strengthen students' acquisition of knowledge, healthy lifestyles, and development of social and positive personal skills. The contents of the program are communication, a positive attitude and optimism, management of peer group pressure and decision making, and risk perception with respect to drug abuse and high-risk sexual behavior. The program also covers strengthening of self-esteem, management of emotions, values and critical attitudes. The program is implemented through weekly participatory training workshops, whose methodology enables the student to acquire skills and knowledge in a pleasant and interesting learning process. The program also provides for the inclusion of the family in its dynamics and activities.

CONAPRED (National Committee for Study and Prevention of Drug-Related Crimes) Panama. Web site: http://www.opadro.com

7. "Culture of Legality", NSIC. This prevention program is an indicated intervention that targets high-risk communities. It is designed to prevent violent behavior and illicit activities, such as drug abuse and trafficking. The program, currently under way in Mexico, Colombia, Peru, and El Salvador, seeks to enhance knowledge of the law and its protective functions in students, as well as to develop pro-social attitudes and behavior, in order to increase support for the law, end tolerance of corruption and crime, and draw attention to the harm they cause to society. Results have found that students who have taken part have demonstrated better problem-solving and decision-making skills, and have also recognized factors that lead to crime. The biggest impact of the program has been on students with most academic problems (those with the worst academic performance).

Contact: National Strategy Information Center (NSIC). 1730 Rhode Island Ave. NW, Washington, D.C. 20036 Tel. (202) 429-0129 Fax (202) 659-5429 Email: col@ix.netcom.com

8. "Good Behavior Game" Dr. Sheppard Kellam. PAXIS Institute

The Good Behavior Game is a program currently implemented in Baltimore, USA, by Dr. Sheppard Kellam. However, its origins date from a study conducted by Barrish, Muriel Saunders, and Mont Wolf (1969) more than 35 years ago.

The prevention program started after numerous studies showed that under-achievement, aggressiveness, and shyness in first-grade students increased the risk of problems in adolescence or adulthood. For instance, learning difficulties in first grade generally led to depression in adolescence. Extreme shyness tends to generate anxiety, while aggressive behavior, such as, for example, truancy, rule breaking, or fighting seem to presage future problems with drug and alcohol abuse, dropping out of school, and delinquency. Owing to the close link between such early high-risk behavior and future problems in adolescence and adulthood, they concluded that the future of children could be improved through intervention as early as first grade in the areas of learning difficulties, aggressiveness, and shyness.

In Baltimore, the Good Behavior Game was chosen to reduce aggressiveness and shyness in the classroom and to encourage cooperative behavior. As with earlier versions of the game, classes were divided into teams, which received rewards when members behaved appropriately and participated in class activities instead of breaking rules and fighting. Three teams per class were created, with aggressive and shy children evenly distributed among them.

Trained observers coded the behavior of students at one-minute intervals over one hour, three days a week for several weeks. The children were highly disruptive in class and were out of their seats or talking for 96% to 80% of the class period, which made instruction virtually impossible. With the program's application the interruption rate dropped immediately to around 10%, which represented a vast improvement.

The PAX Good Behavior Game is a powerful, universal prevention strategy with a good track record based on sound theory and systematic repetitions. It also includes well-designed studies on randomized control groups with long-term follow-up. PAXIS Institute has worked with scientists to make the game easy to use with a high probability of success in classrooms throughout the world.

PAXIS Institute web site: www.paxtalk.com

9. Health and Family Life Education Program (HFLE), CARICOM.

In 1994, the Caribbean Community Standing Committee of Ministers of Education passed a resolution creating the regional program on Health and Family Life Education (HFLE) in the Caribbean as a model that seeks the development of resilient individuals, giving particular attention to activities with the family as an integrating factor. It is a comprehensive, life skills-based program, which focuses on the development of the whole person; enhances the potential of young persons to make the right decisions; increases awareness of the consequences of decisions; fosters the development of skills, practices and knowledge that contribute to a healthy family life; and increases the ability to practice responsible decision-making about social and sexual behavior. In this way, this CARICOM inter-institutional project was established as a political priority for financing from the member states, as well as for support from the United Nations. HFLE instruction is included in the study program at teacher training schools, as well as a specialization course at university level. The curriculum has recently been updated to include aspects connected with HIV/AIDS, and is being tested in three pilot projects, with a view to region-wide expansion of the whole program.

VI. APPENDIX

The following checklist may be useful to determine if programs include research-based prevention principles:

Prevention principles for school-based programs

- 1. Do the school-based programs target children from pre-school to secondary school? If not do they at least target the most critical age groups in middle school?
- 2. Do the programs provide multiple years of intervention (up to the whole of middle school)?
- 3. Is there a well tested, standardized intervention model with detailed lesson plans and student materials?
- 4. Do the programs use interactive methods to teach drug resistance skills (models, psychodramas, debates, group feedback, booster courses, extended practicals)?
- 5. Do the programs foster pro-social bonding to the school and community?
- 6. Do the programs:
- o Teach social competence skills (communication, self-effectiveness, assertiveness) and drug resistance skills that are culturally and developmentally appropriate?
- o Promote positive peer influence?
- o Foster anti-drug social norms?
- o Emphasize skills training teaching methods?
- o Include an adequate dosage (10 to 15 sessions in the first year and another 10 to 15 booster sessions)?
- 7. To ensure the greatest possible benefit, do the programs retain core elements of the effective intervention design? Is there a periodic evaluation to determine if the programs are effective?