

# An Epidemiological approach for the prevention of urban violence: The case of Cali, Colombia

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## Introduction

Violence has been present in human societies since the beginning of recorded history. Wars and massive genocides are part of human history. It is only recently that the question of the inevitability or preventability of these acts has been raised.

"Identifying violence as a public health issue is a relatively new idea", wrote Surgeon General C. Everett Koop in 1985 (Koop, 1989). Later, in 1992, Koop declared that violence was a public health emergency (Koop, 1992). The Ministers of Health of the Americas declared 'Prevention of Violence' as a public health priority in 1993 (PAHO, undated) and the World Health Assembly passed a similar resolution in 1996 (WHO, 1996). At present, the prevention of violence is not only making it to the front page of newspapers but is also very high on the political agenda of mayors and other decision-makers.

Violence, once considered the exclusive domain of the police and the criminal justice system, is no longer so. Social, political and behavioral scientists, and mental and public health specialists are actively interested in this issue. The Inter-American Development Bank and the World Bank currently consider violence and insecurity as one of the major obstacles to development (Guerrero, 1996; Londono, 1996; Ratinoff, 1996; World Bank, 1997). The public health strategy of control of risk factors to reduce disease has been successfully applied in the case of cardiovascular and other diseases. Public health has come recently into the control of the problem of violence (Foege, Rosenberg, and Mercy, 1995). Use of concepts such as multicausality and complexity of the causal network, the concept of risk factors, and the strategy to study diseases of an unknown nature, may be also be useful contributions of epidemiology to the control of violence.

The causal theoretical model of an infectious disease is shown in [Graph 1](#). As can be observed, in addition to an infectious agent, the presence of additional factors is needed in order to produce an illness. The same model can also be applied to the causal network of cardiovascular disease - a non-communicable disease - as seen in [Graph 2](#). As depicted in [Graph 2](#), in addition to an inherited genetic factor, other risk factors like dietary habits, cigarette smoking, and physical exercise, are needed for the disease to develop. A social disease like urban violence can be visualized in a similar fashion as shown in [Graph 3](#). There seems to be little doubt that humans, like most animals are instinctly aggressive. However, there are other risk factors that could alter the outcome of this instinct, most importantly, cultural and religious regulations of conflict, alcohol consumption, etc.

The impressive results in reduction of cardiovascular disease can be attributed to alteration of the risk factors, like reduction of consumption of saturated fats, increase in exercise habits, and reduction of cigarette smoking. Although there has been substantial increases in the knowledge of the biology and neurochemistry of violent behavior, little practical application is available at the present moment. Violence, like cardiovascular disease, can only be controlled by alteration of its risk factors.

## Definition of Violence

Violence can be classified in many ways. It can be classified *according to the person* that suffers it, as in violence against children, women, elderly, etc. It can be classified in *accordance with the apparent motivation*, as in racial, political, etc. Violence can also be classified in *accordance with the nature of the aggression*, as in

physical, psychological, sexual, etc. None of these classifications is better than the other. Each one of these categories is adequate as long as it serves a specific purpose.

There are two categories of violence that have special practical value for public health purposes: *Intentional and non-intentional violence*. In the former are included those injuries resulting from a deliberate act to produce harm. Self-inflicted injuries and death as well as homicides and intentional injuries are included here. While in the latter category are included motor vehicle and other accidents. Both, intentional and non-intentional violence have been causes of political concern recently. Although they share a common strategy, for practical purposes the preventive strategy can be tackled separately.

For public health purposes **violence can be defined as the use (or the threat of use) of physical force with the intent to cause harm to oneself or to others**. The two key components of this definition are physical force and the intention to produce harm. As can be easily deduced, this definition excludes other forms of violence like the psychological or sexual that may have special importance in given environments. For example, while in the United States approximately 25,000 homicides occur every year, between 1.8 and 4.0 million women are abused in their homes and nearly three million children are reported abused or neglected (Hofford and Harrell, 1993). Despite this limitation, the above definition of violence is convenient because it can be easily collected from traditional forms of collecting information like death and injury registries.

### **Risk factors for urban violence**

The following are an enumeration of some risk factors that have been known to be related to violent behavior. The list is not exhaustive and the factors were selected among those that could be of special importance in Colombia.

#### ***Cultural regulation and education***

Culture is probably the most important factor regulating the human aggressive impulse. Society, through cultural attitudes and normative beliefs tends to model the response to conflict. When some kind of reaction is deemed necessary by dispute, the selection of responses is influenced by attitudes toward alternative approaches to conflict resolution. Religious and moral regulations in all societies are powerful deterrents of violent behavior. The lack of influence of the Ten Commandments resulting from desacralization of society has been postulated as an important factor for Colombian violence (De Roux, 1994).

Current literature points to the fact that violent behavior is a learned process that begins at the earliest stages of psycho-social development. Parental behavior and, at a later stage, teacher behavior are important milestones in determining later violent behavior. Inadequate child-rearing practices may convey to children the acceptability and desirability of violence as a normal and expected form of behavior. The role of the family, the role of the mother offering loving care from the very moment after delivery, the role of the father, have been mentioned as crucial for the prevention of youth violence (Prothrow-Stith and Weissman, 1991).

Children may experience violence directly in the form of physical abuse or may witness violence in their neighborhood often involving violence of family acquaintances, which greatly heightens the emotional impact. For example, 17% of a sample of murders occurring in Detroit in 1985 were witnessed by children, and in a quarter of these cases, the victim was a family member (Batchelow and Wicks, 1985).

When there is no credibility of the police or the legal system, responses may go to the application of justice by own hand. These different cultural values have been postulated as an explanation for the differences in homicides rates between the south and the north of the United States.

#### ***Consumption of alcohol and other drugs***

Alcohol consumption has been associated with an increase in both homicide and suicide (McGonigal et al., 1993; Rivara et al., 1997). Consumption of alcohol, particularly in the form of "binge drinking", has been associated

with elevated homicide rates. One revision of five homicide studies in the US, showed that between 47 to 68% of the victims had been consuming alcohol (Pernanen, 1991), other studies have shown similar results in aggressors (Wieszczonek, Welte, and Abel, 1990). Blood alcohol levels above 25mg have been found in homicide victims in Colombia (Mora et al., 1994). On the other hand, policies restricting sale of alcoholic beverages after given times at night, have shown the reduction of homicides in Cali, and Bogota, Colombia (Centro de Referencia Nacional sobre violencia, 1994).

The relationship between the consumption of drugs different from alcohol and violence has been less explored but there are several studies indicating that use of cocaine (Hanzlick and Gowitt, 1991) and opioids (Hammersley et al., 1984) are also associated with violent behavior and crime.

### ***Violence in the media***

By the time a typical adolescent graduates from high school in the US, he or she will have been exposed to 18,000 murders and 800 suicides on the television screen. For the American Society of Psychology, there is no doubt that violence in the media stimulates violent behavior, particularly in the young (Donnerstein, Slaby, and Eron, 1994). Media display of violence is a risk factor for violent behavior at least in young children. Media can also teach that violence is a normal way of solving conflicts and also contribute to desensitization of children to violent acts. The recent killing of a rap personality brought attention to the violence-stimulating role of some of the lyrics and music to which youngsters are exposed.

There are ways in which emotions such as anxiety and anger can be adequately portrayed without stimulating violence and similarly violence in the news if adequately framed do not stimulate violent behavior (PAHO, 1996).

### ***Firearms***

Firearms themselves are not a risk factor for violence but for injuries and death resulting from violent behavior. There seems to be no doubt that the proliferation of firearms in the civilian population is associated with increased homicide rates. In the U.S., firearms cause 80% of the homicides in young people and the observed increment in youth homicides is due to firearms since the other types of homicides have remained constant (Carter Center, 1994). Possession of firearms in the household increases almost three times the risk of dying from firearm injuries (Kellerman et al., 1993). The purchase of a handgun has been associated with a four-fold increase in the risk of suicide, for as long as six years after the purchase (Wintemute et al., 1999). Abundant firearms, remaining from armed conflicts, have been postulated as an explanation for the very high and rising homicide rates after the peace agreements signed in EL Salvador (Cruz, 1997). Control in the carrying of firearms has reduced the number of homicides in Cali and Bogota (Centro de Referencia Nacional sobre violencia, 1996; Villaveces et al., 2000).

## **The DESEPAZ program in Cali**

### **Background**

Cali is Colombia's second largest city. It is an industrial and agricultural city located in the south-west of the country, in the middle of a rich and fertile valley. It has been well known for the civic mindedness of its people and for the numerous foundations and civic organizations devoted to the improvement of the social conditions of the area. Cali is also known for the high degree of collaboration between the public and private sectors - promoted mostly by the local public university.

Communicable diseases and diarrhea were no longer the main health issue in Cali in 1992, when the new Mayor, a physician, was elected. In contrast, the homicide rates had gone from 23 to 90 homicides per hundred thousand population (phtp), in the 10-year period between 1983 and 1993. Homicides and motor vehicle deaths had become the first cause of death in the general population. This significant rise in the rate of crime was accompanied by the public perception of violence and insecurity as the most serious problem in the city. Interestingly, even the

poorest people mentioned violence as having priority over other traditionally important issues like unemployment (that was nine percent in 1993) and cost of food.

Because of the above reasons, the Mayor (co-author of this paper), chose the reduction of violence and improvement of public safety as the main issue of his political agenda, when campaigning for office as mayor of Cali, in 1992. Once elected, he chose a group of people that included the spectrum of the political forces operating in the city. Demobilized guerrillas, representatives of the labor unions, members of the Catholic Church, and leaders of the private sector, were asked to design a policy and a strategy to deal with the problem of urban violence. After three months of work, the group suggested the organization of the program, DESEPAZ, an acronym for the Spanish words DEsarrollo (development) SEguridad (public safety) and PAZ (peace). After several months of joint work together with administration officials, the group had a program that was submitted for approval to the City Council. Once approved it was given ample exposure in media and in private sessions.

## **Guiding principles**

### ***Multi-causality***

Violence was visualized as the expression of diverse and complex social processes that produced a similar outcome, a homicide or an injury. As a consequence, it was not possible to find a single cause that could explain the complete violence picture of the city. A corollary of this principle was that multiple interventions should be designed in order to have a significant impact.

### ***Research***

Interventions should be based on scientific research. At that time there was significant disagreement among the different authorities on the number of homicides, since police data did not coincide with data from other sources. There was no information about the simplest descriptive aspects of violence in the city, such as the profiles of the victims and perpetrators and the specific circumstances in which crimes took place. The contribution of drug traffic and organized crime to the city's violence was completely unknown. It was agreed that a system to provide accurate and timely crime information was crucial.

### ***Prevention***

Prevention of violence is a priority. It was decided that prevention should be prioritized even though it was accepted that traditional control measures were also needed. The extraordinarily high levels of violence in the city called for prevention as the main strategy since traditional methods like increasing the number of police or increasing the number of incarcerated criminal were not possible.

### ***Community empowerment***

Citizens must participate in efforts to reduce violence. It was necessary to change the traditional way of thinking in Colombia, according to which, crime is the Police's business. The Mayor started an effort to encourage the involvement of all citizens and community organizations in the solution of the problem. Empowering the community was a key strategy to improve public safety. Violence and crime were considered to be too important to be left in the hands of the police and military alone.

### ***Tolerance***

A climate of tolerance and respect in others rights, as a base for peaceful living, should be actively promoted by the administration. Education on human rights and constitutional obligations should be disseminated.

## ***Equity***

Social equity is a pre-requisite for peace. It was decided that special effort was to be made to correct the existing inequalities in education, environmental sanitation, low income housing, etc. as conditions that had to be corrected if a healthy social climate was to be created for Cali.

## **Strategic Areas**

### ***Epidemiology of violence***

A Committee was created under the direction of an epidemiologist, with representatives of the Police, Judiciary, Forensic Medicine, Health and Human Rights. This group held weekly meetings in order to analyze and reach consensus on the occurrences of crime in the previous week and to prepare a report for Municipal Security Council that met every Thursday. One of the first tasks of the group was to reach an operational definitions for each of the variables of crime. The committee soon discovered that police records included only the body count of those collected by them on the streets; therefore the injured that died later at the hospital were not recorded. On the other hand, according to judiciary data, those injured outside Cali who had been brought in search of medical assistance and died within the city limits were counted as if the crime had taken place in Cali. To make matters worse, it was discovered that according to Death Certificates, a substantial number of intentional homicides were classified as having an undetermined cause of death, as if authorities had been unable to determine whether the death had been intentional or accidental. Previous discord in reconciling data disappeared with the operation of the Committee.

### ***Law enforcement***

In an effort to improve the effectiveness of law enforcement agents and restore trust between them and the citizens, the following projects were implemented:

#### ***Improvement of the Police***

Although both the Police and the Judiciary institutions are financed and directed by the central government, the municipality decided to invest in their development and improvement at the local level.

As an example, high-rank police officials who earned meager salaries, had to choose between very low quality housing for their families and accepting the "generous offer" of expensive houses or apartments from drug lords, thus initiating a process of corruption. As soon as this situation was identified, the city government initiated a program, with active participation of the private sector of the city, to build enough good quality homes for police officials. An effort was also made to help patrol officers to get or build their homes.

Having established the fact that approximately fifty percent of the street patrol officers had not completed high school, the municipality started a program, with active support of the Police authorities from Bogota, that allowed all members of the Police to complete their high school within two years.

In addition, a special training program on human rights, on the Colombian Constitution and on specific skills related to their job, was carried out to improve the performance of police agents. Six Family Judiciary Precincts were created in the city to help in the solution of family violence.

#### ***City Security Councils***

To achieve proper coordination and maximum efficiency in the use of resources, the Mayor presided over a weekly meeting of the heads of all the institutions involved in law enforcement (police, army, courts, etc.). In these meetings the statistical information of the violent deaths of the past week were analyzed and plans coordinated for law enforcement action.

### *Community Security Councils*

At the request of citizens and community and neighborhood leaders, special private meetings were organized with the local law enforcement agents to discuss specific safety related issues and plan interventions. This proved to be an effective way of restoring trust between citizens and authorities. As a result, citizens started to provide information about criminals.

### *Improvement of Justice*

Several activities were carried out to improve the functioning of the Judiciary. The most important were:

1. Six Family Precincts, headed by a family lawyer with specialization in family issues, were opened during the Mayor's tenure. All of them were provided with multidisciplinary teams (social workers, forensic doctors, and psychologists) to support the lawyer's work and engage in prevention of family violence.
2. "Casas de Paz", or Houses of Peace, are buildings where all the public institutions involved in public safety (Police, Courts, Family Precincts, etc.) establish their headquarters. The first "House of Peace" was inaugurated in the largest poverty-stricken area of the city. This house offered the opportunity to enhance personal contact among staff members of different institutions and proved to be effective in enhancing cooperation, coordination, and effectiveness in their work. Another House of Peace was built later in other deprived area of the city. The Houses of Peace have been adopted in other cities of Colombia as a successful model of taking justice nearer to the people.
3. Ten local communities were provided with "conciliation centers" where advanced undergraduate law students helped them solve their conflicts before they officially entered the legal system.
4. Twenty local communities were provided with legal offices where advanced law students helped people solve legal problems.
5. A computer network was set up between courts, police, and other law enforcement agencies to improve their communication and performance.
6. Crime Investigation brigades. The statistical analysis of crime revealed that only eight percent of murderers were identified. Special brigades for the investigation of murders were created and trained. As a result, at the end of the Mayor's tenure, 18% of the perpetrators of crime were identified.

### *Legal actions*

#### *Restrictions on alcohol sales (Ley semi-seca)*

Alcohol production is a monopoly and the main source of revenue for the states in Colombia and alcohol consumption is a distinct cultural Colombian habit for celebrations. Early epidemiological data showed that almost two thirds of homicides took place during late evening and early morning hours, particularly during weekends, and autopsies studies revealed that 26% of the victims of violent deaths were intoxicated with alcohol. On account of these facts, the city government established the "ley semi seca" (semi-dry law) by ordering to close bars and discotheques at 1 a.m. on weekdays, and 2 a.m. on Fridays and Saturdays. Earlier, they were open throughout the night. The reduction in the number of injuries reported by hospital and traffic authorities were so obvious that the measure could be retained despite the initial opposition of the owners of liquor selling places.

#### *Restrictions on weapon carrying permits*

DESEPAZ data indicated that firearms caused approximately 80% of the homicides in the city. Permission was obtained from the Ministry of Defense in order to forbid the use of permits to carry firearms on those occasions indicated by descriptive epidemiological analysis. For example, during weekends that coincided with payroll payment, and on certain other dates, like Mothers day, Halloween, Christmas and New Year's eve, the carrying of firearms was prohibited. There was considerable discussion of the benefits of this selective disarmament policy. It is culturally acceptable in Colombia to carry firearms for self-protection, an idea endorsed by the military - the only ones authorized to manufacture and sell firearms in the country. Whenever disarmament was applied, results were so impressive that discontent was overcome by public acceptance of the policy.

### *Social development*

### *Employment*

A micro-enterprise development program was carried out all over the city to provide small business owners with - 1) Business management training workshops, 2) Individual Tutoring, and 3) Credit ([Footnote 1](#)). Job oriented training centers were established to provide training in specific skills according to the specific demand for labor: car and motorcycle mechanics, care of children and elderly, hotel maids, restaurant waiters/waitresses, garment industry workers, etc.

### *Education*

At the beginning of the Mayor's tenure, there was a shortage of 25.000 primary school openings in the city; 40,000 new openings were created such that 100% coverage for public primary education was insured for the next few years.

Improvement of the quality of education through the creation of six "Didactic Centers" in poor neighborhoods: These are centers that provide: 1) Homework rooms with libraries and tutors, 2) Computer Rooms, 3) Typing class rooms, 4) Television and VCR, and 5) Conference rooms. Local schools can rent the facilities for computer or typing classes, as well as for special presentations, and children may register to go every day to do their homework. The "Didactic Centers" organize special educational/recreational activities after school and during school vacation periods such as art, reading, poetry, etc.

Five new high schools were opened and a plan was formulated to achieve total coverage in secondary education within the next five years.

### *Self-built housing*

The largest public housing project in the history of Colombia was launched through the construction of "Ciudadela Desepaz". This is an urban development project to help 28.000 minimum wage families build their own houses (Footnote 2). The Ciudadela Desepaz is totally planned development, with streets, sanitary infrastructure, schools, health services, churches, and six square meters of park per inhabitant. In addition to the Ciudadela Desepaz, another 12,000 houses were built for families who live on less than two minimum wages, for a total of 40,000 houses for the poor.

### ***Improvement of social cohesion and political empowerment of citizens***

#### *Education for peace*

A wide array of educational commercials about peaceful coexistence, civic education, tolerance, and responsible behavior were broadcast through the local television channel. A mass media campaign was launched with collaboration of the private sector to educate Cali citizens on tolerance and respect. Benito Juarez aphorism, "Peace is respect of the others rights" was the motto of this campaign.

#### *Children Friends of Peace*

Given the fact that more than 80% of murders were committed with firearms as well as the need to restrict permission to carry firearms, the City Government launched a special program to raise awareness about this issue. The program was called "Children Friends of Peace". It consisted of inviting children to give up their war toys in exchange for: 1) free admittance to the City's recreational facilities for one year; 2) training workshops on civic education and peace; 3) a huge party in the City's largest and best furnished park, with clowns, puppets, excellent raffles, etc.

#### *Community Government Councils*

As a strategy to enhance political empowerment and participation at the local level, the Mayor established periodic public meetings of the Mayor and all members of his Cabinet (Footnote 3), with leaders and citizens of each commune, called "Community Government Councils". Meetings took place every Monday, from 7 to 9 p.m. They were held in churches, or theaters, or school auditoriums. The average attendance was about 200 to 300 people, although at times there were as many as 700 or 800. One week before the Community Government Council, the Mayor's private secretary held a preparatory meeting with both political and non-political leaders of the community (Parent-Teachers-Associations, youth groups, senior citizens' groups, religious groups, etc.), to set

the agenda of the public meeting and choose the speakers. At these public meeting, time was also assigned for spontaneous interventions of the public.

To complement the effect of these councils, people were offered workshops on how to survey public works and how the municipal budget was handled, so that they could check the honesty and performance of contractors and public officials. They could report suspicions of corruption either at the Community Government Council, or directly to the Mayor's private secretary. Community Government Councils were held at a different commune each time, so that there were about two per commune per year. They had to be canceled in pre-election periods, as well as in the Christmas season. In addition there were about 12 holidays on Mondays per year in Colombia.

#### *Family Program (Footnote 4)*

A special program was launched to enhance family and community cohesion. This program assumes that in modern urban settings, the family as an institution is deprived of the power to fulfill its functions. These functions are - 1) Economic: generate the resources to fulfill the material needs of its members; 2) Emotional: provide emotional nurturing and education to its members; 3) Social: Transmission of life, education of children, transmission of cultural values, care of the elderly, etc.

The economic empowerment of the family was addressed through the above mentioned, employment generation efforts. The empowerment of families for the fulfillment of their emotional and social functions was achieved through Workshops for Parents and for schoolteachers. While the enhancement of social cohesion at the local level was addressed through projects aimed at promoting family recreation and table games, enhancing inter-generation interaction and enhancement of interaction between families, schools and communities.

#### *Enhancement of Cultural Roots*

Citywide projects were carried out to reinforce national identity and cultural roots. Special parades and celebration of national and local holidays, promotion of national and local symbols (flags, hymns), local cuisine festivals and contests, kite contests, and other local traditions contests.

#### *Youth Houses*

The opening of seventeen youth houses proved to be an effective way of providing young people from the poorer areas with a safe place to use as their own for parties, meetings, dancing, aerobics, and cultural events. Two popular music orchestras, several theater groups as well as sports teams evolved from the youth houses. After a year of preparation, a six month long Olympic Event took place, including many different sports and involving more than one hundred thousand participants of all sexes and ages.

#### ***Special interventions***

##### *High Risk Youth Programs*

The spontaneous offer to give up their weapons by one of the gangs was the starting point of a two month long negotiation process between them and a representative of the City Government. Both sides made requests and commitments. Based on the situation and specific needs of these boys (although there were also a few girls), a program was launched that included the following opportunities -

1) *Employment:* Some of the members of gangs support their mothers and siblings, and all of them need to support themselves. Most of the members of gangs are sexually active and many have children. These gangs received training to form micro-enterprises and became contractors of the City Government in services like cleaning of buildings and markets, gardening, and the upkeep of parks. As an example, a much needed six-kilometer road was built in a very poor area and was paved with cement blocks. A gang was the owner of the cement block factory and members of gangs were hired to lay the blocks.

Public works contractors were invited to include boys involved in the rehabilitation program, among the people they hired for the City's works.

2) *Education:* A special high school program was designed to facilitate the continuation of their education while

working. Young people involved in the program were admitted to the Job Oriented Training Centers and learned skills that allowed them to open private businesses or get jobs. For example, some opened motorcycle and bicycle repair shops.

3) *Group support and mentor guidance*: A team of educators was hired to organize group activities with the high-risk boys and provide them with role models and guidance. These educators were coordinated and directed by a priest belonging to a community with a long tradition of work with young people in difficult circumstances.

4) *Community acceptance*: Community leaders were invited to support the program by helping restore trust between the citizens and the young boys and girls involved in the rehabilitation process. The response of community leaders was very positive; some of the leaders devoted themselves very seriously to supporting the young boys and girls in their effort to become law-abiding citizens.

#### *Social rehabilitation of "La Olla"*

La Olla is a neighborhood in decay located in the center of the city, where social problems such as poverty, drug dealing and consumption, alcoholism, prostitution, family violence, and abandoned children are present at the utmost level of severity. La Olla was also one of the most violent communes of Cali. A special program based on the coordination of a wide array of public, private, and religious institutions was launched, to improve the living conditions of people living in La Olla. A Social Service Center was built, in which all the institutions participating in the project established their programs. It has classrooms and meeting rooms, as well as a fully-equipped health center. Many programs were carried out such as rehabilitation and job training for prostitutes, a "night-care center" for the babies of prostitutes, a special "open school" for street children, and a prostitution prevention program (Footnote 5).

#### *Traffic accident prevention*

Descriptive variables for traffic accident deaths were carefully analyzed and appropriate measures were taken. Street and pedestrian overpasses were constructed in critical areas as indicated from analysis of the geographical mapping of accidents. Since epidemiological data indicated that alcohol was involved in many accidents, an aggressive campaign to reduce drunk driving was implemented. The campaign included educational messages and active patrolling particularly during weekends. Blood alcohol levels of suspect drivers were routinely measured. Educational messages stressed the fact that accidents are not a product of bad luck but of reckless conduct. The application of the "semi-dry law" had a strong beneficial impact on the reduction of traffic injuries and homicides - results that were widely publicized.

## **Discussion and Results**

Traditional thinking in Colombia attributed violence to poverty and, thus, all efforts were directed to ameliorate the poor. Rural development was considered a prerequisite for peace despite the fact that most of the violence in Colombia takes place in the cities. Little could be done until the structural changes needed in Colombian society could take place.

The public health approach avoids the theoretical discussion on the causes of violence and focuses on controlling its risk factors. Not all the risk factors are equally amenable to treatment and priorities need to be established. Measures such as disarmament of civilians and restrictions in the times when alcohol could be sold, do reduce the total homicide rate but do not control violence completely. However, reducing homicides allow the police and judiciary to concentrate on those risk factors that are the most difficult to deal with. Cali reduced the absolute number of homicides by 600 between 1994 and 1998 - a substantial reduction that allowed the attack on other factors including organized crime or modification of cultural patterns. These are factors that require considerable resources and continued effort.

There is no fixed recipe to control violence that can be applied in all contexts. Identification of the specific risk factors operating in a given context is necessary. Experience has shown that factors that operate in Cali may not

be have the same importance in other cities of Colombia.

Results shown in [Graph 4](#) indicate that homicide rates in Cali declined significantly starting in 1995. However, simultaneously with the application of DESEPAZ, many other changes were taking place in Cali. The chiefs of the Cali cartel were imprisoned. Unemployment reached a low of seven percent in 1994 and began to rise in the following years. Since DESEPAZ was not meant to be a controlled experiment, we can never be sure of what was the specific contribution of the programs to the general descent of homicide rates in Cali.

Two thirds of homicides occur during week ends and 25% of the homicides victims were intoxicated with alcohol. This data suggest a substantial part of the Cali violence is due to social disorganization. Drug traffic do contribute to homicides in Cali but the most important effect has been an indirect one. In our opinion, the effect of drug-trafficking has been to let organized crime infiltrate and corrupt the police and the justice systems, thus favoring impunity and social disruption.

The problem of long term continuity of policies is a very important one. In Cali, the application of the restriction of carrying firearms or selling alcohol has been intermittent. Other programs such as the high risk youth programs were modified substantially. Interestingly enough, the only project that has been kept by all administrations has been that of data collection and information. DESEPAZ has published weekly data since 1993. Violence and crime rates have become the subject of public analysis by the press, the academia, and the private sector. A healthy mechanism of evaluation has evolved and has permitted the universities and private sector to become informed evaluators of the police and the administration.

### ***Footnotes***

1 The methodology of this program was developed by the Carvajal Foundation in the late seventies. With support from the Inter-American Development Bank (IDB), it was extended to the whole of Colombia and to other Latin-American countries.

2 This program also applies the "Self-Construction Methodology" developed by the Carvajal Foundation, which was presented as a world model at the HABITAT UN Conference in Istanbul (May, 1996).

3 Compulsory personal attendance of the secretaries; they could send delegates only when out of town or the absolute need to be elsewhere.

4 Prevention of Substance Abuse through the Enhancement of Family and Community Cohesion (Project Financed by the United Nations Drug Control Program (UNDCP).

5 Young girls migrating into the city are lured into prostitution by pimps who pretend to welcome them at the bus station. A welcoming service was established to either help them go back home or help them get trained to earn a living in the city.

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