
PART III

Chapter 9

**HEALTH OF ADOLESCENTS
AND YOUNG PEOPLE**

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I. Introduction

Recognition that the health of adolescents and young people is a basic ingredient for the development of the countries of Latin America represents a significant change in thinking which should have an important impact on the formulation of development policies and strategies for the Region. Adolescent health constitutes a major challenge for political leaders and planners because of the vulnerability of this age group from the social, economic, and health standpoints (1).

The trend toward decentralization and regionalization in Latin America, encouraged and supported by the Pan American Health Organization (PAHO), has prompted increasing emphasis on the provision of care at the local level, where the ideas contained in the primary health care strategy are consolidated with social participation and local programming (2).

Based on the knowledge accumulated by programs on the health of adolescents and young people, it is recommended that integrated, collaborative, and multicenter or network programs be developed. These programs should be articulated intersectorally, with emphasis on health promotion and disease prevention, and should be guided by a vision of health as a determinant of quality of life and as a component of economic and social development.

Provision of health care at the local level is considered the best strategy for the integration of programs to improve the health of adolescents and young people. This integration should take place, first, through the reorganization of health practice based on a multidisciplinary approach and, second, through the incorporation of adolescents' knowledge of the health-disease process into intervention programs. Finally, knowledge about the health conditions and risks to which adolescents are exposed should be transferred to the services and to the community in order to ensure that the planning of activities will in fact address their needs.

The incorporation of this age group into the health plans of the Region of the Americas has become more and more urgent in the face of the growth of the adolescent and youth population in absolute and proportional terms. This trend has been conditioned by a prolongation of the period of youth as a result of the extension of education, social changes, and the growing "problems" that adolescents and young people present. The situation has revealed the gaps and deficiencies in the health care available to adolescents and the lack of participation by young people in the care of their own health and in the promotion of community well-being (3). At the same time, PAHO has demonstrated the need to assign high priority to programs on the health of adolescents and young people, which has translated into a series of resolutions and recommendations adopted in various forums within the Organization (4).

During the last 15 years, various health care, educational, and research initiatives for adolescents and young people have been developed in the Region. However, these efforts have not had any detectable impact on the health and quality of life of this population group, partly due to their limited coverage and partly due to their vertical focus on specific problems, but mainly due to the non-existence of explicit policies that would ensure the permanence, consistency, and integration of the activities.

Development of the local level provides an ideal way to integrate activities and facilitates the implementation of health programs for adolescents and young people. Programs that currently exist can serve as the starting point for the introduction, testing, and progressive incorporation of basic strategies at the local level, thereby facilitating both the initial institutional changes and their definitive adoption.

II. Frame of reference

1. Current situation of adolescents and young people in the Region

Based on the WHO definitions, adolescents are individuals between the ages of 10 and 19 years, while young people are aged 15 to 24 (5). Bearing in mind the limitations of such definitions, it is accepted that a health program for adolescents and young people seeks to provide health care and services to the population aged 10-24 years.

Based on that age range, in 1990 the population of adolescents and young people constituted around 31% of the total population of Latin America and the Caribbean, numbering approximately 137 million. That figure is expected to reach 172 million by the year 2000. Latin America accounts for two thirds of the adolescent population of the Americas (5, 6). An estimated 75% of the youth population of the region lived in urban areas in 1990 and it is projected that 80% will be urban by the year 2000 (7, 8).

The growth of this population has placed an increasingly heavy burden on health, education, labor and other systems. The situation is exacerbated by urban migration, especially in marginalized sectors, which contributes to the creation of a psychosocial atmosphere in which violence and juvenile delinquency are common.

The level of education has improved significantly in Latin America and the Caribbean during the past twenty years. In 1990, the gross enrollment ratio (total enrollment at a given level of the educational system, regardless of whether or not the individuals enrolled belong to the age/population group normally enrolled at that level) was 106% at the primary level, 52.3% at the secondary level, and 17.1% at the post-secondary level.

The rate of enrollment in the population aged 12-17 rose from 36.4% in 1961 to 70.5% in 1985. In 1990, this rate was between 40% and 50% in El Salvador, Guatemala, Honduras, Nicaragua, and Paraguay; between 55% and 70% in Mexico and Venezuela; and over 70% in countries such as Argentina, Brazil, Chile, Cuba, and Uruguay. The most worrisome educational disparity that persists in all the countries is the one that exists between rural youth of both sexes and their urban counterparts (9, 10). The proportion of adolescents 10 years of age who attend school is over 70% in most of the countries; however, this proportion falls to 50% among 15-year-olds, and by age 20, only 20% of the adolescent and youth population remains in school (11, 12).

Adolescents aged 15-19 years make up between 40% and 50% of the economically active population (EAP) of Latin America, with a greater proportion of males who work than females (2:1). In recent years, however, larger proportions of female adolescents have joined the workforce, especially in urban areas. In addition, it is estimated that about 10 million children in the Region work, many them illegally in low-wage jobs with poor working conditions and no social security benefits, all of which represents a serious threat to their health.

The most serious and enduring adverse effect of the economic crisis for the youth of the Region is the reduction of time spent in school and the increase in the numbers of young people who drop out of school to go to work. The lack of minimum qualifications hinders these young people from becoming productive members of the workforce and condemns them to underemployment (13).

The mortality rate for adolescents is low compared to that of other age groups. In 1986, the rate

was 7.4 per 10,000, compared to a child mortality rate of 550 per 10,000 in the same year. The main causes of death in the group aged 10-14 years in 1990 were accidents and violence, malignant neoplasms, and infectious diseases. In the group aged 15-19 years, the leading causes were accidents, homicide, suicide, malignant neoplasms, diseases of the heart, and complications of pregnancy. Complications of pregnancy, childbirth, and the puerperium are responsible for high death rates in some countries (5, 14).

Although adolescent deaths in the Region do not account for a large percentage of general mortality, most of the deaths that do occur in this age group can be considered preventable, as they are linked closely to risk behaviors. Analysis of years of potential life lost (YPLL) reveals that external causes account for 40%.

It is estimated that 10% of adolescents in Latin America suffer from a chronic disease. In recent years, the "new disorders," such as learning disorders, attention deficit disorder, and eating disorders, have emerged as increasingly important problems in this age group. Tuberculosis remains a concern, with the incidence ranging from 21.3 to 182 per 100,000 population in the group aged 15-19 years. In several countries, diseases of the heart are one of the first five causes of death; 50% of these deaths are due to rheumatic heart disease. Adolescents aged 10-19 account for 4% of all AIDS cases reported by all the countries. According to WHO, at least half of the individuals infected with HIV are under 25 years of age, which makes AIDS a major concern for the youth of Latin America (15).

Poverty, inequity, and discrimination produce and maintain an adolescent population at risk. A substantial number of adolescents are growing up in circumstances of adversity and limited resources, which compromises their health, their development, and their lives. Alcohol abuse in this group increased during the 1980s. In Chile, 70.5% of all deaths from accidents and violence in the group aged 14-25 are alcohol-related. Tobacco use—in contrast to the sustained decreases being observed in most of the developed countries—is on the rise, especially among young women. The most frequently used illicit drug is marijuana, which is frequently combined with alcohol and tobacco. It is estimated that between 10% and 30% of adolescents have used marijuana. Use of cocaine, especially cocaine base/paste, is increasing in the Region. Inhalants are used most frequently by poor and marginalized preadolescents (18).

The average age of marriage is 20.5 years, with variations between countries, which depend on factors such as the woman's situation, level of education, and the increase in employment opportunities. The available data suggest that the age of marriage has changed little in the Region as a whole, although it has begun to increase in some countries, such as Colombia, the Dominican Republic, and Peru. It has remained the same in Ecuador, however, and has actually decreased in El Salvador and Guatemala (13, 15, 16).

The fertility rate among adolescents has declined in most of the countries. However, the absolute number of children born to adolescent mothers has increased, as has their proportion in relation to the children born to women of all ages. The Central American subregion has the highest adolescent fertility rates in the region; in four of the countries the annual rate exceeds 100 per 1,000 women aged 15-19. Fertility rates are higher in rural areas and among populations with lower levels of education.

A demographic and health survey (DHS) of women of childbearing age carried out in Central

and South America in the late 1980s found that, in the cohort aged 20-24, half of the women reported having had sexual relations by age 20 and 25% by age 17. A similar survey of young men between 15 and 24 years of age showed that males become sexually active earlier than females. The use of contraceptives among adolescent women is less frequent than among women of all ages, and the figures are lower still in rural areas (15, 17).

2. Perception of health needs by adolescents

Adolescents view health as something more than the mere absence of disease. Being healthy for them means being able to realize their total potential; being able to function physically, mentally, and socially; and enjoying good emotional health. The health concerns of adolescents include a wide range of non-traditional health problems relating to social interaction and emotional needs (18).

In general, the health concerns of this age group fall into four broad categories: (1) school and future; (2) health, physical appearance, and drugs; (3) emotional issues; and (4) social issues. Among older adolescents the most frequent concern tends to be the future, whereas for younger adolescents concerns about physical appearance predominate, especially among girls (19).

Adolescents recognize that certain behaviors are harmful to health. They also recognize that many of the factors that influence these behaviors fall outside the traditional purview of the health sector, including family relationships, peer relationships, and problems at school. However, like adults, they underestimate the potential impact that their behavior can have on their health and they assume that the risks associated with certain behaviors will disappear as they grow older (20).

The role of the family and of peers is very important at this stage. Although the nature of adolescents' interpersonal relationships may change, the family remains a crucial source of social support. Parents serve as models for adolescents, as been demonstrated by studies of tobacco use. Peers may be a source of positive support, but they may also be a negative influence. Numerous studies have shown the association between unhealthy behaviors and peer pressure, but this association may not be causal since it is possible that adolescents choose peers who support behaviors that they have already decided to adopt (18).

3. Health services for adolescents

Providing health services for adolescents is a challenge that is often frustrating, given the inadequacy of the services available to this population group. These deficiencies may be attributed to a number of factors, including the following (21, 22):

- Lack of personnel who are qualified and motivated to provide health care for adolescents and young people.
- Fragmentation of existing health services, especially in the area of reproductive health.
- Insufficient financing for health services for young people.
- Lack of political awareness: The negative image of adolescents and young people in society

makes it difficult to foster a favorable climate for political, legislative, and programmatic action.

- Lack of use of health services by adolescents, due to disorganization of the supply of services and lack of appropriate communication, health promotion, and health education strategies.
- Tendency toward over-medicalization of services: According to Hanlon, the problem may not be indifference to adolescents' needs, but the habit of thinking that health problems require a medical solution. The lower priority given to adolescents is attributed to the existence of lower mortality in this group, lack of a medical specialty in adolescent health, and the multiple causality of their problems.
- Lack of evaluation of health services and clear delimitation of their geographic scope, inadequacy of information systems, and lack of local programming.
- Administrative and economic problems inherent in existing programs, as a result of which their personnel are underpaid, overworked, and lack social prestige.

Most adolescents receive care only at moments of crisis, and the care given is focused on ensuring their recovery from a physical pathology. This type of care is criticized by young people as inefficient, bureaucratic, discouraging, and often inaccessible (23). As a result, it might be concluded that health services for adolescents are not capable of meeting their health needs, based on criteria of service coverage (defined as the capacity to meet the health needs of the majority), impact (capacity to produce effective results through the activities carried out), and user satisfaction (positive assessment of the services received).

III. Objectives

The general purpose of health initiatives for adolescents and young people is to improve the quality of life of this population group in Latin America. The primary objective of programs for youth should be to promote healthy growth and development through interventions targeting determinants such as family, education, employment, health services, health policies, and legislation. At the same time, health care and educational activities should be promoted at the operational level with a view to implementing integrated services.

The specific objectives in the area of health of adolescents and young people are:

- a) To promote the development of an intersectoral policy on adolescents and young people, carrying out activities in coordination with other sectors in order to foster the integration of care and the rational use of resources;
- b) To foster and develop appropriate knowledge, attitudes, and practices among adolescents and young people as a means of encouraging healthy lifestyles;
- c) To implement integrated health care services for adolescents and young people, in close collaboration with other programs, with emphasis on prevention and health promotion;
- d) To promote the development of human resources to work in areas relating to health of adolescents and young people.

IV. Recommended Strategies

1. Integrated approach

The multicausality of the problems of youth requires that programs include participation in all spheres in which adolescents are involved: family, school, work, friends, and various national sectors. It is known that risk behaviors are interrelated. Programs should therefore take a broad, holistic approach, targeting interventions more to risk factors than to the behaviors themselves. These programs should also be integrated with programs on maternal and child health, as well as with one another.

2. Greater emphasis on health promotion and primary prevention than on curative care

It is recommended that, in addition to programs that provide treatment for the common health problems of adolescents and young people, preventive programs be designed, focusing interventions on groups that are potentially at risk of developing undesirable behaviors or problems that will affect their health in some way. Examples of the application of this strategy include prevention and health promotion campaigns and public health education programs (utilizing theater, video, cinema, radio, discussion forums), which can be carried out in educational institutions and other areas where these risk groups are found.

3. Emphasis on the neediest and highest-risk groups

Programs should be directed mainly toward providing education, resources, technology, and other forms of social support for the groups at highest risk. They should also target specific high-risk groups, such as sexually active adolescents, children of alcoholics, abandoned adolescents, and others.

4. Youth participation

Adolescents and young people should be both recipients and active participants in health initiatives. They should take part both in the design of their own programs and activities and in decision-making and evaluation. For this reason, mechanisms should be developed that will facilitate ample participation by young people, as a genuine expression of social participation.

5. Community participation

The program should respond to community needs and should incorporate community participation. It is necessary to establish and maintain regular channels of communication, involving adolescents and young people themselves in the identification and analysis of problems and needs and in the development of proposals and programs to address them. An effort should also be made to promote a more positive view of adolescents and young people, who otherwise tend to behave in accordance with the negative stereotypes that society attaches to them.

6. Intersectoral and interdisciplinary services

An integrated package of services for adolescents and young people is needed. No isolated program is capable of addressing all their needs, which makes an intersectoral approach, as well as coordination and planning among various institutions, essential. Activities should be interdisciplinary, with the participation of the key groups that interact with young people, including the family, the school, health services, churches, and others.

7. Development of leadership

A study undertaken by Dryfoos in 1990 examined programs aimed at preventing risk behaviors among adolescents and found that the most successful programs were directed by charismatic leaders with great sensitivity toward adolescents, who not only felt love and concern toward them but also had high expectations for them. These leaders also worked hard to equip youth with the knowledge and abilities to enable them to succeed in the future. In addition, they were skilled at management, administration, and fund-raising.

8. Institutional development

Interventions designed as part of programs for adolescents and young people should be aimed more at bringing about changes in institutions than at changing individuals. For example, if education is not tailored to the needs of young people, school drop-out rates will be high; hence, the effort to effect change should not be directed at the individuals (the students) but at the institution (the school).

9. Networks

Networks are seen as a strategy for linkage, coordination, and exchange between institutions and/or people who decide voluntarily and in a concerted manner to pool their efforts, experience, and knowledge in order to achieve common goals in relation to the health of this age group. The result is a network characterized by adaptability, flexibility, horizontality, fluidity, and spontaneity in relationships, which is suited to the operational capacity of the local level.

10. Targeted programs in the school system

This strategy should be applied taking into account the reality in different countries and localities. Where favorable circumstances exist, school interventions are recommended, as is the incorporation into the school community of extracurricular activities such as theater, arts, and sports. It is also recommended that linkages be established with the labor sector through school curricula, work experience, and volunteer community work (22, 31-33).

V. Implementation of the Strategies

1. Stages of implementation

The health situation in the countries and their health policies are key to the implementation of adolescent health initiatives. In countries or communities where a certain degree of organization exists at the local level, programs based on the foregoing strategies can be more easily and quickly implemented.

In countries in which health care at the local level is in an incipient or transitional stage, an attempt should be made to introduce some changes or modifications. What is important is to involve the most important actors in this process, inasmuch as care at the local level represents a change in health practice—practice being understood to mean the use of knowledge to transform a given reality (2).

1.1 Institutional practice

Decentralization of resources to the local level is essential. Decentralization is basically a process of redistributing power, within which political and economic interests tend to come into conflict. In order for this strategy to produce the desired results, intermediate stages are required, including the formulation and implementation of legal and administrative provisions, strengthening of managerial capacity at the local level, and development of human and technological resources that are suited to the new responsibilities and functions. Managers at the local level will no longer simply carry out the directives of higher officials but will function as executives who determine, establish, adopt, and follow policies; who promote and mobilize political and institutional resources; and who coordinate and facilitate processes of participation (27).

1.2 Professional practice

A consensus should be reached as to the processes and techniques to be applied by the health professionals responsible for implementing the strategies. The ethical dimensions of professional practice and the rights and duties of professionals vis-à-vis the rights of adolescents and young people should be discussed.

The search for a conceptual framework that will make it possible to intervene in the reality of adolescents and young people is crucial to the effort to foster change in health professionals. This framework should expand the focus of their practice from the individual to the family, risk groups, the community, and the environment.

It is also important to specify the activities that are to be carried out in regard to the various aspects of health care (health promotion, disease prevention, and curative care), the focus of the activities (individual, family, community, environment), and the various medical fields (medicine, nursing, nutrition, dentistry, pharmacy).

1.3 Social practice

The development of health care at the local level provides an opportunity for changing social practice with respect to the health of adolescents, especially in the cultural and political domains.

In the cultural domain, social practice is related to knowledge of the living conditions of adolescents and young people, as well as knowledge of the processes that differentiate social groups in terms of risks and possibilities for health or illness. Different perceptions and beliefs exist with regard to health-disease processes. On one hand, there is the perception of the community (with its culture of resistance), and on the other, there are the views of health professionals (with their culture of dominance and scientific superiority).

Through community participation, social practice can seek to put an end to a system that places health professionals and the young people of the community at opposite ends of the spectrum of power and knowledge. Recognition of the value of popular wisdom about illness and healing and about the relationship of health to specific ways of life is essential in order for social practice to help bring about a change in the health situation.

In the political domain, social practice refers to the involvement of young people at the various levels and moments at which health activities are carried out. This involvement should be based on an understanding of the right of citizens to participate in social processes, in which they are both actors and objects of the action (27).

2. Activities for the implementation of the strategies

Because in most local systems there are limitations with regard to knowledge, experiences, attitudes, and traditions concerning promotion of the overall health of adolescents and young people, and information on the epidemiological profile of health risks and impairments is often lacking, it is advisable to create a consultative or advisory group or else a sort of adolescent health "unit" (which will not necessarily be a physical space), with the participation of someone who has received training and has prior experience. This "unit" could be supported by an intersectoral advisory commission, which should:

- 2.1 Know about the population of adolescents and young people, including its size, distribution, occupational situation, and other demographic features, as well as about resources and needs;
- 2.2 Interpret information on the health of the group and use complementary information from other systems;
- 2.3 Generate processes of communication and concerted action between agencies, institutions, and programs;
- 2.4 Establish channels of interaction with the community, families, and their resources, applied to the health of adolescents and young people;
- 2.5 Be familiar with national legislation and policies and be able to adapt them;
- 2.6 Be familiar with standards governing behavior.

According to the document *Lineamientos para la programación de la salud integral del adolescente* [Guidelines for Integrated Adolescent Health Programming] (28), published by PAHO in 1993, the main functions of the local level in any program are:

- To organize, supervise, and evaluate the health activities for which it is directly responsible and those of other systems responsible for promoting the overall health of adolescents;

- To encourage the participation of governmental and nongovernmental organizations that demonstrate an interest in the health of adolescents and young people in the area of the local health system;
- To coordinate or participate in the coordination of plans, programs, and projects in the area of adolescent health;
- To promote joint effort and coordination with programs of adolescent health at the intermediate local level, as well as with geographically adjacent areas, in order to improve epidemiological surveillance and health promotion;
- To mobilize national, regional, public, and private resources to strengthen intersectoral and institutional programs at various levels, and to promote legislation to protect adolescents and young people in general and those who are disabled in particular;
- To adapt technical standards and strategies to the prevailing conditions in the region and to the health conditions of young people;
- To promote healthy knowledge, attitudes, and practices among adolescents and young people through activities in which they and their leaders are involved;
- To ensure, to the extent possible, the use of the local communications media and the production and application of educational materials and participatory methodologies;
- To identify training needs for differentiated and non-differentiated adolescent health services and to promote appropriate training;
- To facilitate combined academic and practical training with universities and other institutions in order to carry out shared educational, training, and service activities;
- To mobilize the community, community organizations, and related public entities to address the educational, employment, recreation, occupational guidance, and health needs of disadvantaged youths;
- To ensure universal access to technologies for assessment, identification of risks, and information science in relation to adolescents and to utilize these technologies to construct a basis for programming, education, and epidemiological surveillance;
- To promote the development and execution of multisectoral and health services research;
- To coordinate intersectoral actions to control the principal risk factors and health impairments.

VI. Steps for Implementation

The aim of strategic planning is to determine the health needs of the population of adolescents and young people, weigh those needs against available and potential resources, establish priority program goals, plan administrative actions, and evaluate the results (29).

Applying the concepts of strategic programming, the programming of health activities for adolescents and young people can be said to comprise several "moments" (a "moment" is defined as an instance, occasion, circumstance, or situation within a continuous process or chain of events that has no defined beginning or end) (30-32).

1. Analytical moment

This is the stage at which the health situation of adolescents and young people is analyzed, but the analysis goes beyond an assessment of health to examine *what is really happening and/or what really exists*. This appraisal of reality includes analysis of the elements that contribute to the health situation, including the rules of the system, social background, and social events or trends. It may also include the following elements:

1.1 Definition of the area of application

When programming is done at the local level, the population and geographic area in which the network of services will be responsible for providing health services for adolescents and young people has already been defined.

1.2 Description of the health situation and the available health care structure

This activity should be carried out by the various actors or social groups involved in the process, taking into account the interests and knowledge of each one. Descriptions of the adolescent and youth population, their health problems, and environmental conditions, as well as identification of the available resources, are needed (see Annex 1: Assessment Instrument).

- The description of the target population should be based on demographic, socioeconomic, and geographic information. Possible sources of this information include census, housing, and family data, as well as population maps that identify where young people live and the places where they gather, study, and work, among other sources.
- The health problems can be described on the basis of analysis of indicators, surveys, and consensus techniques (forums, focus groups, key informants, Delphi methodology). It is recommended that several methodologies be used in combination rather than relying on a single method. For example, health needs could be identified by means of a survey of needs (19) and participatory assessments through community focus groups consisting of both adults and adolescents (20).
- The political, social, economic, and physical environments in which programs are developed should be carefully studied, with particular attention to the distribution of power in the various environments.
- The available health structure and its resources should be examined through a survey of services, applying the efficiency assessment instrument (see Annex 1).

1.3 Identification and prioritization of problems

This analysis should consider not only diseases but also problems of access, organization, and efficiency of health services; problems related to education and recreation; and the characteristics of the family, work, and physical environment. Whenever possible, there should also be a gender analysis of all aspects of the social system that influence the lifestyles of adolescents.

This stage implies a participatory process, in which the various actors involved in the program discuss and come to an agreement on the most important problems based on their own appraisals and interests. For this purpose, it is recommended that problems be prioritized on the basis of frequency, severity, and trends; characteristics of the most affected groups; availability of resources; and possibilities for effective intervention (28).

2. Decision-making moment

At this stage the proposed plan of action for comprehensively addressing the health needs of adolescents and young people is formulated. In other words, decisions are made about *what should be done*, strategies are developed, the actors who will participate are identified, operations are designed, and the actions to be taken and the operational levels of the plan are specified. An effort should also be made to establish the directionality of the plan, bearing in mind the various scenarios.

2.1 Selection of technologies

Unlike other programs in which the technologies to be used are associated with equipment and apparatuses, the activities to be carried out in adolescent health programs are mainly related to training of health personnel and enhancing their ability to work in multidisciplinary teams and use techniques that will encourage the participation of young people, parents, and teachers (28).

3. Strategic moment

In this "moment" the proposed plans (*what should be*) are analyzed and adjusted in light of existing political, institutional, and economic limitations. Analysis at this point focuses on the relationships between forces and the interest in maintaining an initial situation or modifying it.

4. Tactical-operational moment

This is the action stage, at which priorities, levels of processes, operations, and roles of the various actors in the process are determined. In other words, it is decided *how to do what should be done*. The activities at this stage are equivalent to the development of an operational plan.

4.1 Establishment of goals, formulation of programs and subprograms

Responsibility for finding solutions to the problems of adolescents and young people is assigned to the various institutions in accordance with the availability of resources, establishing the goals to be attained and formulating programs. In most cases, negotiation between institutions in different sectors requires not only technical expertise but also political skills in order to resolve any conflicts of interests that may arise.

4.2 Development of a plan of activities and its execution through the services

The programming of extrasectoral activities comprises the majority of health promotion activi-

ties and requires a clear definition of the responsibilities assumed by the various institutions. It is therefore advisable for each of the participating institutions to carry out its own programming of activities in accordance with the directionality and general objectives previously agreed on. It is also advisable for the commitments assumed by the various institutions to be formalized through explicit, though flexible, agreements, which can be evaluated and adapted.

In the health sector, the organization of the health services system should be analyzed and levels of care and programming should be determined. In the case of health care for adolescents, the complexity of the services will be conditioned by the personnel's level of training, the possibility of creating interdisciplinary teams, and the possibility of supplying care differentiated by time and place.

Most health services for adolescents in Latin America are undifferentiated and are provided by first-level health facilities as part of general care for adults or children (pediatric services). In such cases, the effectiveness of the care depends on the personnel's level of training in health promotion activities, as well as in the detection and treatment of the specific problems of adolescents.

In recent years, more differentiated services, provided by multidisciplinary teams, have emerged at the primary level in urban areas. In addition to the health problems for which adolescents require care, these services carry out prevention and health promotion activities and also coordinate activities with other institutions, both within and outside the health sector, encouraging the participation of young people themselves.

At the secondary and tertiary levels, care is always differentiated and is provided by multidisciplinary teams of health professionals within the system of referral of cases that cannot be resolved at the primary level or that require hospitalization. The referral system should ensure universal and timely access to the level of care required for the problems that need to be solved (28).

4.3 Financial programming

Once the desired intersectoral and interinstitutional coordination has been established, it is recommended that resources be pooled for those activities for which a common commitment has been assumed. For example, financing for activities such as personnel training, formulation of guidelines, meetings with adolescents, and educational materials might be shared in order to alleviate budget pressures and encourage coordination and efficiency of the activities.

4.4 Monitoring and follow-up of the operational plan

It is important to monitor the program by keeping track of the activities and the participants. Reality will indicate the route to be taken; the program planned is only an indication of the desired direction and should not become an end in itself. It is important to keep the process flexible so that strategies and activities can be modified as needed and new alliances can be developed between institutions or social groups.

4.5 Evaluation of control activities and indicators

The evaluation of integrated adolescent health programs mainly involves assessing the extent to which needs have been met and determining whether the problems detected during programming have been controlled, as well as appraising the quality of the goods and services that are being provided.

It is recommended that services be evaluated in terms of *processes, structure, and results*, with the understanding that the results will be achieved if the processes programmed are carried out; these in turn will be carried out to the extent that the necessary resources and structures are available.

A project sponsored by PAHO and the Kellogg Foundation to support national initiatives has been developing instruments for the evaluation of integrated adolescent health services, which include instruments for assessing efficiency in differentiated services, missed opportunities, and tracer conditions.

- a) The survey of missed opportunities has been developed as a useful methodology for qualitative evaluation of adolescent health services. It is used as a complement to other types of evaluation and can easily be applied at the regional level. This instrument basically measures *processes* and focuses on the actions of health professionals in the delivery of health care and their interaction with patients. A "missed opportunity for integrated care" has been defined as any occasion on which the adolescent does not receive the minimum care in the course of a year.

- b) "Conditions of efficiency" in adolescent health services are a group of characteristics or requirements that a health service should meet in order to respond appropriately and comprehensively to the health needs of the adolescent population (10 to 19 years). This instrument basically evaluates *structure*, in terms of the following aspects: programming and administration, guidelines and procedures, health education, community services and community participation, human resources, physical plant, material resources, supplies and support services, and output data (hours/activities executed and hours/professionals used). The instrument makes it possible to express the efficiency of each service in numerical terms. The best rating would be 100%. Values of 80% or more are considered acceptable; values between 40% and 79% represent an unsatisfactory situation, and values of under 40%, a critical situation (33).

- c) The tracer conditions methodology analyzes process and results at the same time. The central concept of the methodology is that, to determine the quality of care provided to adolescents and young people, it suffices to evaluate several specific problems, or "tracer conditions," which, when combined, provide a frame of reference for examining the interaction between providers, patients, and the environment. These "problems" may be diagnostic categories or preventive, diagnostic, or therapeutic procedures. Hence, the evaluation may look at diseases, activities, or tracer conditions. Ideally the selection should include a group of tracer variables in order to reflect all the care provided to this age group (preventive and curative, acute and chronic, age and sex) (34).

Variations in institutional practice, professional practice, and social practice can also be evaluated by applying the conceptual framework used in this chapter.

- To evaluate variations in *institutional practice*, the variables selected might include managerial skills and capacity of the adolescent health program, organizational structure and overall design of the program, decentralized and coordinated work between networks, development

of participatory processes, efficient management of resources, and development of appropriate communication processes.

- To evaluate variations in *professional practice*, the following variables might be studied: suitability of sectoral and extrasectoral services to provide care that responds to the needs and demands of adolescents, capacity to meet spontaneous demand, targeting of activities to the highest-risk groups and health promotion strategies for preserving the health of young people, teamwork and a multidisciplinary approach, the humanization of care, and ethical aspects of health care and professional practice.
- To evaluate variations in *social practice*, variables relating to equity will be measured, including the following: coverage and access, real efficacy or effectiveness, and social efficiency. Coverage refers to the supply of services that will potentially be used by adolescents, while access refers to the probability that these services will actually be used. Social effectiveness is expressed in the changes that occur in the health of adolescents and young people, particularly changes in rates of illness and death—with emphasis on those that are avoidable—and the contribution of the program to improvement of the quality of life for adolescents and young people, the objective of which is the satisfaction of the users.

Social efficiency is a concept that links results and economic costs. It can be measured on the basis of production costs and quantity of goods and services produced. It can also relate the monetary resources allocated to the result obtained in terms of avoided deaths or diminished morbidity—in other words, cost/effectiveness.

For each of the variables selected, indicators will be developed according to the characteristics of each program, taking into account the nature of the problems to be addressed, the context in which they occur, and the resources available for their solution.

VII. Case Study. Stages in the Implementation of an Adolescent Health Program at the Local Level Program

The health care model that is described below represents the operational implementation of a differentiated adolescent health unit within a health center at the primary care level under the direction of an individual trained in adolescent health and staffed by an interdisciplinary team.

Stage 1: Incorporation of the program at the local level

The program was initiated at the primary care level, articulating the services with the secondary and tertiary levels and endeavoring to promote community participation. Activities initially focused on health care for adolescents aged 10-19 years and on the school health program. The latter has been implemented in the schools located in the geographic area, for which responsibility has been assigned to the health center of the locality, through the Joint Health and Education Commission (HEC). This body, which meets monthly, ensures coordination between the health and education sectors, which is required by law. The Commission consists of the teachers and health professionals responsible for school health activities.

The adolescent health program was incorporated at the local level (Figure 1) to carry out vertical health programs by thematic areas (programs for children, for mothers, and for adults, among others). To incorporate the program, it was necessary to design horizontal activities in all programs of the health center. For example, dental program activities were carried out through the school health program, prenatal care activities were designed as part of the women's health program, and monitoring of children of adolescent mothers was included in the child health program.

Stage 2: Networks of health services

As the activities of the adolescent health program at the primary level were consolidated, better coordination with the secondary level became necessary, and the concept of networks of services was implemented. Specialists who had the greatest affinity or interest in working with adolescents were identified at the secondary level and with them a network of specialists was formed (Figure 2). These specialists personally attended cases referred from the primary level and interacted among themselves. This led to joint activities, especially in the treatment of chronic patients, and pointed up the need for an adolescent health unit at the tertiary level. A unit consisting of six beds was created and was subsequently enlarged through the training of personnel and the integration of academic and practical training. A standard clinical record is used at all levels of this network of services.

Stage 3: Networks of school services

Similar to what occurred in the preceding stage, as the school health program was consolidated, greater interaction was required to coordinate the activities (health screenings with a risk approach; training of teachers, parents, and adolescents; health care). This intersectoral approach required continuous and effective coordination, with appropriate referral and back-referral, both by teachers to the primary care facility and from the primary care facility to the school community and to the secondary-level health system. Here, also, the strategy of networks was used, and a teachers' network was formed with the members of the HEC (Figure 3). This network of teachers coordinated the activities of the health and education sectors, but also initiated activities between them in order to optimize the efforts of the schools with adolescents in the community.

An interesting and innovative strategy for encouraging youth participation was the formation of a health and education commission that included adolescents from the schools. Each school chose an adolescent to represent it, and the student selected went to meetings with the professionals of the adolescent health unit. At these meetings, referral systems for adolescents at risk or with specific needs were developed (for example, referral to a sexuality counseling program). Educational activities were also selected in response to real needs of young people in the community, especially on issues such as plans for the future.

Stage 4: Networks of community services

In order to involve adolescents who were outside the school system, health promotion activities were designed and carried out through adolescent health promoters (Figure 3). This activity consisted of training adolescents in a specific area such as graphic design, theater, or sports, but adding an important personal development component. The theater workshops were very successful and

the adolescents involved are now presenting a play-forum on the issue of sexuality entitled "I, Sara." The graphic design workshop was the most popular and well-attended training event, and it gave rise to a youth microenterprise, in which, in addition to graphic design technique, the participants are learning about management, accounting, and administration.

In order to implement activities in the community, once again the strategy of networks was used. A network of organizations that work with young people in the community, known as the "youth network," was formed (Figure 4). The establishment of this network in the community was a slow and difficult process, which unfolded in several stages (35):

- a) Survey of youth organizations in the area, which served to promote mutual knowledge and acceptance of the adolescent health unit in the community.
- b) Dissemination of information in the community on the activities and resources offered by the various organizations, for which purpose a guide to community services for young people was compiled. This guide served as a source of information and facilitated coordination, which helped to prevent duplication of activities.
- c) Promotion of the use of the services available through the organizations that make up the youth network, one of which is the adolescent health unit.
- d) Development of a collaborative relationship between the various organizations in order to optimize resources, which meant carrying out and financing activities jointly. It took some time to consolidate this collaborative relationship, but over the past year numerous joint activities have been carried out through "networking." For example, three more youth organizations are now participating in the youth microenterprise and it has thus ceased to be exclusively a program of the adolescent health unit.
- e) Self-perpetuation of the network and maintenance of the installed capacity, which is the final phase, in which the youth network becomes independent of the activities and leadership of the adolescent health unit. This required the identification and training of leaders, which in turn made it possible, after three years, to arrive at a common annual plan of action for the youth network. However, there continue to be problems, both in the consolidation of the network and in the political context.

In summary, this program carried out coordinated activities that linked various levels, from the community up to the tertiary care level, in a single geographic unit, with special emphasis on adolescent health. Because it was rapidly integrated into specific activities of the various programs of the health center, the program was quickly imitated as a model for action by other programs at the primary care level. It thus served as an agent of change and demonstrated the validity of intersectoral and interdisciplinary action.

An adolescent health program at the local level can be initiated at any level of care and/or in the community itself. If it is initiated in the community, it must be articulated with the health services and coordinated with the health system and its referral levels. It can also be initiated at the tertiary level, where, for example, ensuring the optimum development of adolescents with chronic conditions increasingly requires closer coordination with the school and occupational systems, which in turn makes coordination with the primary care level and community institutions and organizations indispensable.

VIII. References

1. Maddaleno M, Suárez N. **Situación de salud de los adolescentes y jóvenes en América Latina.** In: *La salud de los adolescentes y jóvenes en las Américas.* 2ª Edición. Washington, DC: Organización Panamericana de la Salud; 1994. (Publicación Científica 524). In press.
2. Organización Panamericana de la Salud. **Sistemas locales de salud (SILOS).** Bol Of San Panam 1990; 109(5 y 6).
3. Loureiro, S. **Conceptos y estrategias de integración con los servicios de salud a través del desarrollo de los sistemas locales de salud (SILOS).** In: Kisil M, Chaves M, eds. *Programa UNI. Una nueva iniciativa en la educación de los profesionales de la salud.* W. K. Kellogg Foundation; 1994: 38-42.
4. Organización Panamericana de la Salud. **La salud de los adolescentes y jóvenes de las Américas, Edición 1985. Washington, DC: OPS; 1985.** (Publicación Científica 489).
5. Organización Panamericana de la Salud. **Las condiciones de salud de las Américas Edición 1990.** Washington, DC: OPS; 1990. (Publicación Científica 524).
6. Centro Latinoamericano de Demografía (CELADE). **Proyecciones de población 1950-2025.** Año XXIII, No. 45. Santiago, Chile: CELADE; January 1990.
7. Maddaleno M. **Health in Adolescents in Latin American Countries: Are they Healthy?** Special Project Report. Epidemiology and Preventive Medicine Track. MPH Program, George Washington University, Washington DC; 1990.
8. United Nations. **Prospects of World Urbanization.** Demographic and Health Survey Reports. New York: UN; 1988.
9. United Nations Educational, Scientific and Cultural Organization (UNESCO). **World Education Report 1993.** Paris: UNESCO; 1993: 56.
10. Economic Commission for Latin America and the Caribbean (ECLAC). **Statistical Yearbook for Latin America and the Caribbean.** Santiago, Chile: ECLAC; 1993.
11. Comisión Económica para América Latina y el Caribe (CEPAL), División de Desarrollo Social. **Tendencias actuales y perspectivas de los jóvenes en América Latina y el Caribe.** Santiago, Chile: CEPAL; 1992.
12. United Nations Educational, Scientific And Cultural Organization (UNESCO). **Statistical Yearbook 1992.** Paris: UNESCO; 1992.
13. Maddaleno M, Silber T. **Epidemiological View of Adolescent Health in Latin America.** *Journal of Adolescent Health Care* 1993; 14(8): 595.
14. Singh S, Wulf D. **Today's Adolescents, Tomorrow's Parents: A Portrait of the Americas.** New York: The Alan Guttmacher Institute; 1990.
15. United Nations. **Adolescents Reproductive Behavior: Evidence from Developed Countries.** Vol. I & II. New York: UN; 1990.
16. Organización Panamericana de la Salud. **Drogas.** *Bol Of San Pan* 1989; 107(6).
17. Centro Latinoamericano de Demografía para América Latina (CELADE). **Boletín demográfico CELADE.** XXVI-52. Santiago, Chile: CELADE; July 1993.
18. Millstein S, Litt I. **Adolescent Health at the Threshold: The Developing Adolescent.** In: Feldman S, Elliot G, eds. *At the Threshold: the Developing Adolescent.* Cambridge, Massachusetts: Harvard University Press; 1990: 431.
19. Florenzano R, Maddaleno M, Zubarew T, Pérez V, Vega J. **Análisis comparativo de distintos sistemas de atención del adolescente en el área Oriente de Santiago.** *Revista Chilena de Pediatría* 1992; 64(4): 216.
20. Unger G et al. **Diagnóstico participativo de salud en adolescentes y jóvenes urbanomarginales.** Proyecto Kellogg. 1992.
21. Lanphier M. **Public Health Issues that Affect the Delivery of Adolescent Health Care.** *The Society of Adolescent Medicine Newsletter Summer 1990* ; I(1).
22. Maddaleno M. **Organización de sistemas de atención de salud para adolescentes y jóvenes.** Corporación de Promoción Universitaria; 1992. (Documento 52).

23. Weinstein J. **Los jóvenes pobladores y el estado: una relación difícil.** Santiago, Chile: UNICEF/CEDEP; 1990.
24. Moreno E. **Youth in Latin America and the Caribbean. Proposal for the Decade.** W. K. Kellogg Foundation; May 1990. (Kellogg Foundation Report).
25. Perrone N, Niremberg O. **Notas para trabajar en red.** Buenos Aires: CEADEL; 1990. (Mimeographed document).
26. Dryfoos J. **Adolescents at Risk. Prevalence and Prevention.** New York: Oxford University Press; 1990: 227.
27. Alarid HJ. **Bases para la programación en los sistemas locales de salud.** In: Paganini JM, Capote Mir R., eds. *Los Sistemas locales de salud: conceptos, métodos, experiencias.* Washington, DC: Organización Panamericana de la Salud; 1990: 314-320. (Publicación Científica 519).
28. Moreno E, Serrano C, García T. **Lineamientos para la programación de la salud integral del adolescente.** Washington, DC: Organización Panamericana de la Salud; November 1993. (Document HMP/GDR-3/94.1).
29. Paganini JM. **Programación en los sistemas locales de salud.** In: Paganini JM, Capote Mir R, eds. *Los sistemas locales de salud: conceptos, métodos, experiencias.* Washington, DC: Organización Panamericana de la Salud; 1990: 303-314. (Publicación Científica 519).
30. Paganini JM. **Los sistemas locales de salud y las acciones integrados de salud.** In: Paganini JM, Capote Mir R, eds. *Los sistemas locales de salud: conceptos, métodos, experiencias.* Washington, DC: Organización Panamericana de la Salud; 1990: 483-486. (Publicación Científica 519).
31. Restrepo H, Amate A, Anzola E. **Los sistemas locales de salud y la salud del adulto.** In: Paganini JM, Capote Mir R. eds. *Los sistemas locales de salud: conceptos, métodos, experiencias.* Washington, DC: Organización Panamericana de la Salud; 1990: 497-512. (Publicación Científica 519).
32. Tancredi F, Kisil M. **La estructura de la planificación.** In: Kisil M, Chaves M, eds. Programa UNI. *Una nueva iniciativa en la educación de los profesionales de la salud.* W. K. Kellogg Foundation; 1994: 71-87.
33. Zubarew T, Suárez NE. **Evaluación de servicios.** [Document prepared for a meeting on instruments for the evaluation of adolescent health services, sponsored by the Pan American Health Organization, Rio de Janeiro, August 1994].
34. Fernández de Busso N. **Condiciones trazadoras en adolescentes.** [Document prepared for a meeting on instruments for the evaluation of adolescent health services, sponsored by the Pan American Health Organization, Rio de Janeiro, August 1994].
35. Jiménez L et al. **Fundamentos de una red de organizaciones comunitarias para adolescentes y jóvenes.** Proyecto de Juventud. (In press).
36. Zubarew T. **Aplicación de instrumentos de evaluación de calidad de atención de servicios para adolescentes.** [Final report of a meeting on instruments for evaluating the quality of adolescent health services, sponsored by the Pan American Health Organization, Santiago, Chile, November 1993].

IX. Annexes

Annex 1 Instrument for Assessment of the Health Situation of Adolescents and Young People

(Translated and adapted from *Curso de Capacitación en Gerencia* [Management Training Course], published by the Program on Human Resources Development, PAHO/Brazil, 1993, for a course for multipliers held in Santiago, Chile, 1994).

1. Purpose

To identify and analyze the characteristics of the adolescent population and the context in the area of action.

2. Objectives

- 2.1 To describe the demographic characteristics and living conditions of adolescents;
- 2.2 To analyze the structure of morbidity and mortality among adolescents;
- 2.3 To identify and describe the types of services that are offered to the adolescent population;
- 2.4 To identify the means of production in an adolescent health unit;
- 2.5 To identify and describe existing resources in the area, grassroots organizations, non-governmental organizations, and governmental organizations, among others;
- 2.6 To analyze the degree of coordination and articulation between resources;
- 2.7 To analyze the coverage of services and the impact or degree of satisfaction of the population in relation to the services provided;
- 2.8 To identify the social forces that determine the organization and/or operation of health services for adolescents and their rationality.

3. Activities

3.1 Research the following basic data on the area and on the adolescent population:

3.1.1 Population

- Total area and boundaries of the community
- Total population/population assigned to the health service
- Urban and rural population
- Age and sex distribution
- Rate of population growth
- Migration patterns
- Forms of social organization

3.1.2 Education, employment, and socioeconomic situation

- Participation by the general population and by young people in the workforce
- Occupational activities of the general population and of young people
- Unemployment rate in the general population and among young people
 - School drop-out rate by grade, type of institution, and cause
- Educational establishments in the community
- Recreational activities for young people in the community
- Youth participation (politics, organizations, and other)

3.1.3 Community health indicators

- General and child mortality
 - Immunization coverage
 - Profile of general morbidity and adolescent morbidity
 - Malnourished population under 6 years of age
 - Malnourished population under 1 year of age

3.1.4 Basic sanitation and transportation conditions.

3.2 Identify, **from a health standpoint**, the main health problems that affect the adolescent population. Analyze the morbidity profile. Use several sources of information, including legal-police records and other sources (percentages of arrests for intoxication, substance use, pregnancies, dental caries).

3.3 Research perceptions of the findings of the studies referred to in the preceding paragraph (3.2) **among adolescents themselves** (the focus groups methodology can be used for this purpose).

3.4 Identify and compare the convergent and divergent points between assessments 3.2 and 3.3; analyze their significance (**perceptions of the various actors**).

3.5 Collect information on morbidity and mortality among adolescents and young people in the area; include other health indicators, if information exists.

3.6 Compare adolescent morbidity and mortality data with information on living conditions and characteristics of the adolescent population.

3.7 Draw conclusions and compare them with adolescents' perceptions of the main health problems.

4. Services and productivity

4.1 Study what type of services are provided by the adolescent health care unit: medical consultation, dental services, health screenings, vaccines, tests, home visits, health education activities, epidemiological surveillance, emergency care, distribution of foods and drugs.

4.2 Study the characteristics and infrastructure of the adolescent health unit, utilizing the efficiency assessment instrument.

4.3 Study the following information on production of services for the last month or year.

Study of the production of services

SERVICES

1. Consultations
 - 1.1 Medicine
 - 1.2 Psychology
 - 1.3 Therapy
 - 1.4 Educational psychology
 - 1.5 Dentistry
 - 1.6 Midwifery
 - 1.7 Specialist
 - 1.8 Other

2. Complete immunizations
3. Laboratory tests
4. X-ray exams
5. Other

NUMBER

MONTH () YEAR ()

Calculate the output of the health unit by relating the above figures with demographic data (total population aged 10-19 years). Analyze the following indicators of coverage:

$$\text{CONSULTATIONS PER ADOLESCENT/ YEAR} = \frac{\text{Total medical consultations}}{\text{Adolescent population of the area}}$$

$$\text{SPECIALIST CONSULTATIONS} = \frac{\text{No. of specialist consultations}}{\text{No. of medical consultations}} \times 100$$

Calculate the productivity of the unit as in the following example:

$$\text{PRODUCTIVITY} = \frac{d \times 100}{a \times b \times c} \quad \text{where:}$$

a = Number of physicians working 4 hours/day (e.g., 3 doctors to attend cases of illness in the adolescent health unit)

b = 16 consultations/4-hour day (output of 4 patients per hour)

c = Number of working days per month (20)

d = Number of consultations during the month (e.g., 800 consultations).

$$\text{Hence, productivity in this example would be: } \frac{800 \times 100}{3 \times 16 \times 20} = 83\%$$

Annex 2
Accessibility Assessment Instrument

(Translated and adapted from *Curso de Capacitación en Gerencia* [Management Training Course], published by the Program on Human Resources Development, PAHO/Brazil, 1993, for a course for multipliers held in Santiago, Chile, 1994).

1. Interview adolescent health unit user

1.1 At the start of the visit, request the following information from the adolescent:

• Name: _____

• Age: _____ Sex: Male Female

• Address: _____

• Place of study: _____ Place of employment: _____

• Insurance: no yes What kind? _____

• Mode of transportation used to get to the unit: _____

• Is this your first visit to the unit? _____

• How were you received? _____

• Who was your first contact at the unit? _____

• How long did you wait to be seen by a health worker after you arrived? _____

• Reason for visit: _____

• Did you have an appointment: no yes for _____

• What are your expectations with regard to the solution of the problem that prompted your visit? _____

- Purpose of the institution:

- What are the factors that facilitate or hinder the use of the unit's services by adolescents?

- Facilitate:

- Hinder:

- What are the main health problems of the adolescent population?

- What problems are dealt with by the adolescent health unit?

- What other services do adolescents need?

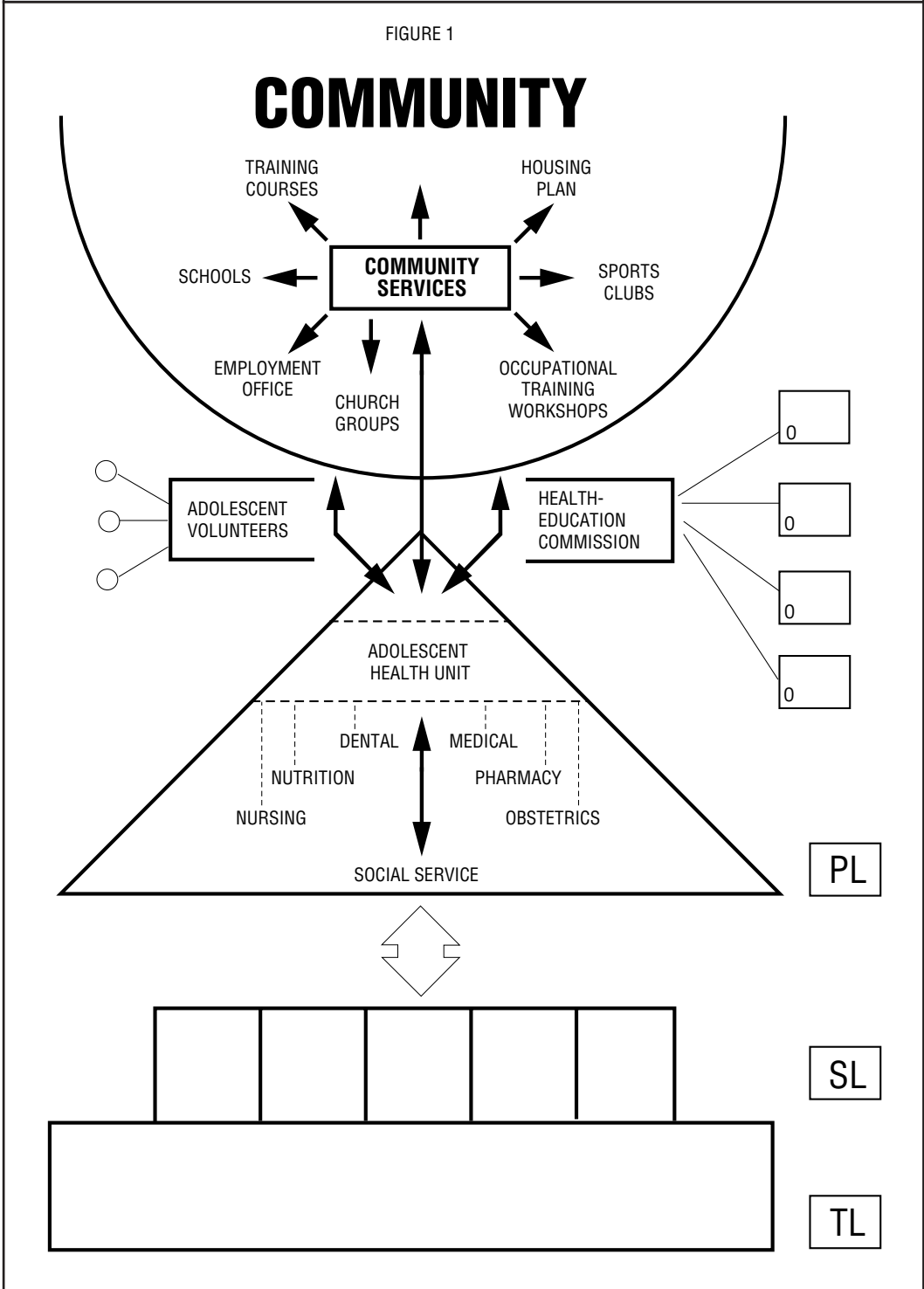
- Why?

- What means do adolescents use to solve their problems?

- How should the adolescent health unit work?

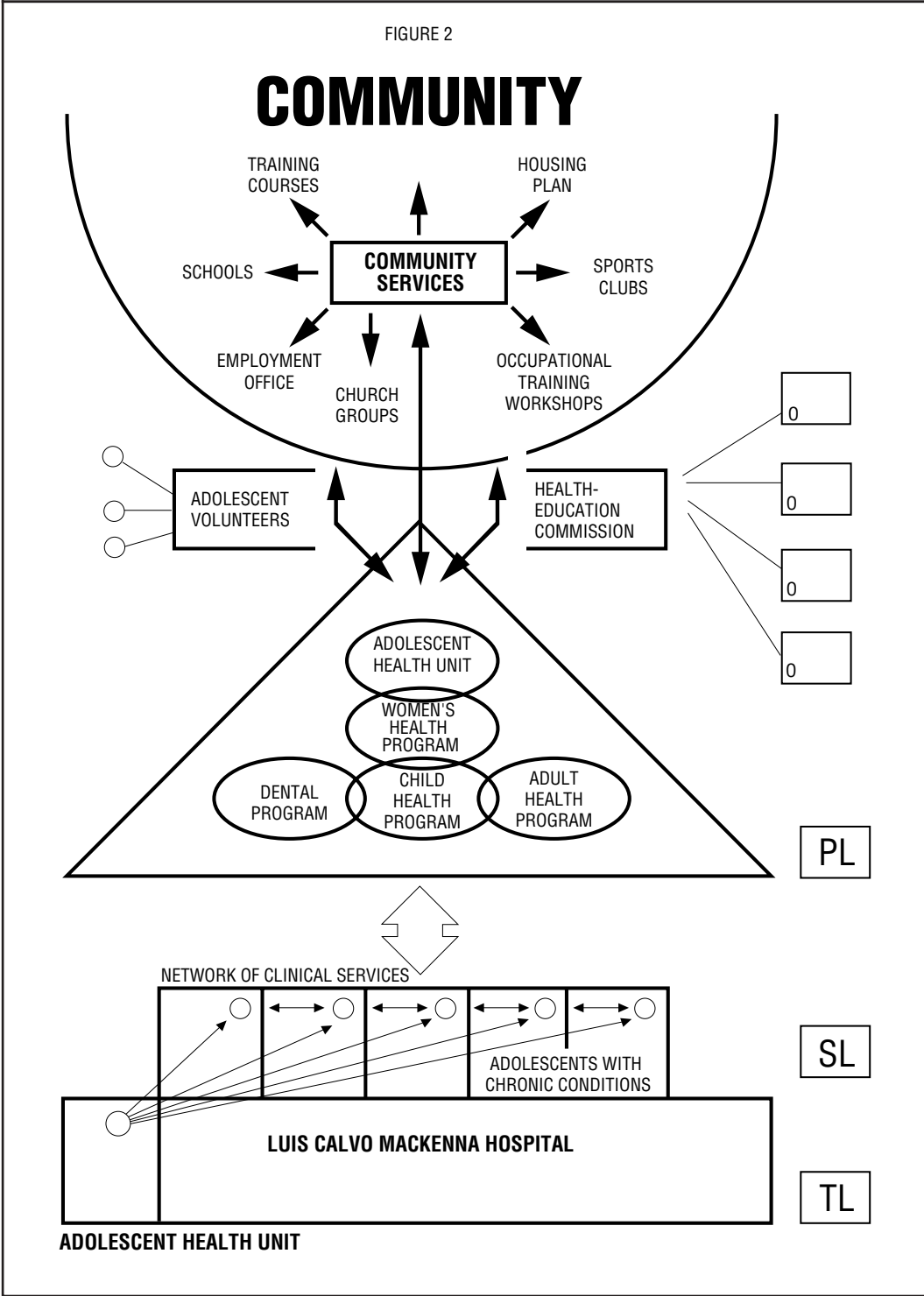
Annex 3
Graphic Representation of the Case Study

FIGURE 1



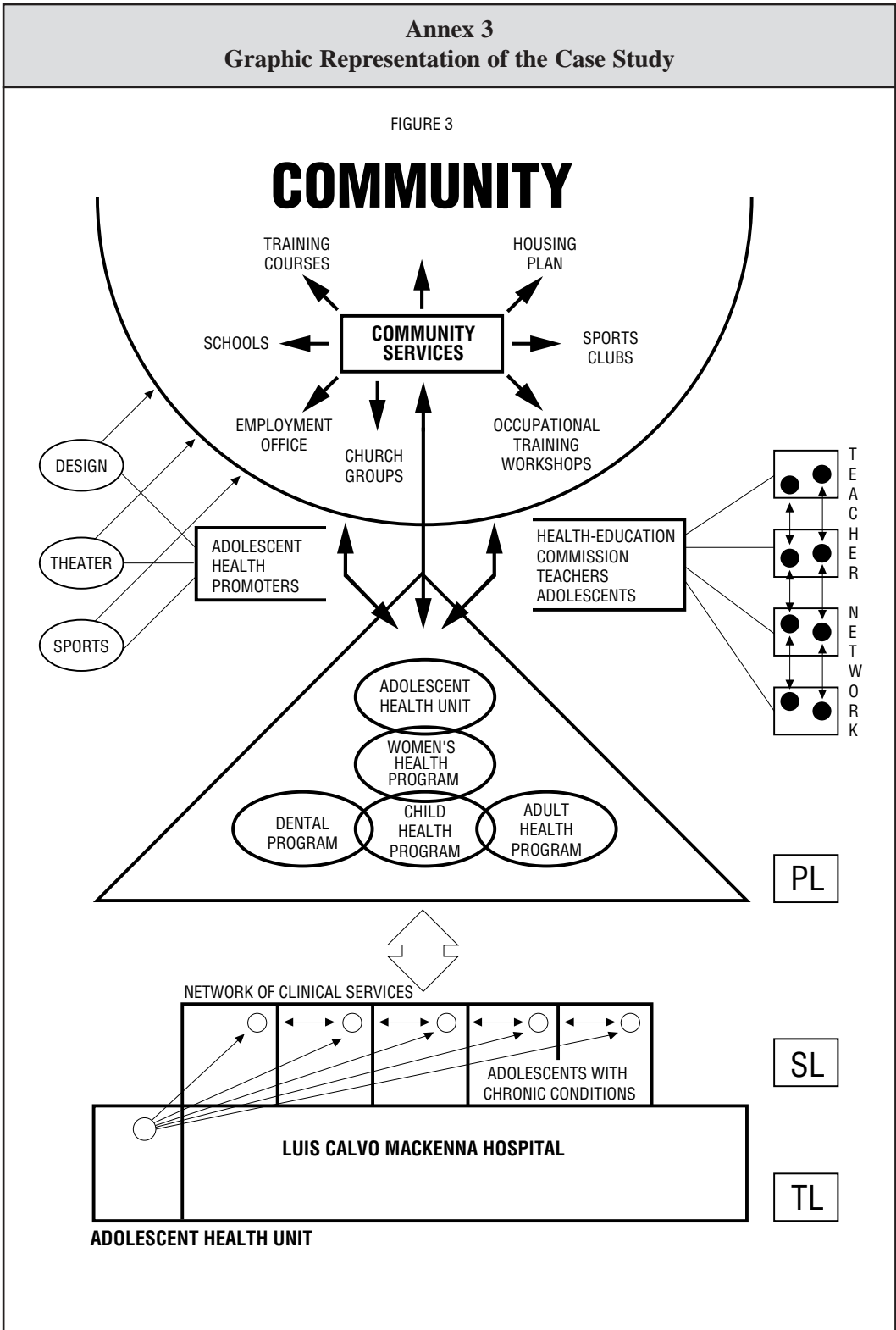
Annex 3
Graphic Representation of the Case Study

FIGURE 2



Annex 3
Graphic Representation of the Case Study

FIGURE 3



Annex 3
Graphic Representation of the Case Study

FIGURE 4

