



PAN AMERICAN HEALTH ORGANIZATION  
WORLD HEALTH ORGANIZATION



## 126th SESSION OF THE EXECUTIVE COMMITTEE

Washington, D.C., 26-30 June 2000

*Provisional Agenda Item 4.9*

CE126/16 (Eng.)  
26 April 2000  
ORIGINAL: ENGLISH

### CHILD HEALTH

Child health in the Americas represents a serious challenge. Ten years after the World Summit for Children, steady progress can be seen in areas such as infectious disease control, immunization coverage, nutritional aspects, prenatal care coverage, and skilled care in childbirth. Health, in its integral positive sense, is a social product that is both a determinant of human development and, therefore, progress. It is well-known that appropriate policies and strategies can help to change reality for the better and generate expectations of human development through the development of children. This is the key to progress toward equity and global development in the Region.

Many of the countries are currently in a stage of epidemiological and demographic transition, facing new challenges and old ones as yet unresolved, as well as the emergence of new diseases and social challenges that impact on health. At the same time, they must be vigilant and lay foundations for children to enjoy good health throughout life. There are human, ethical, social, and economic reasons to make child health a priority for action and investment. The new millennium offers an opportunity to take stock of the situation, disseminate the successes, and design appropriate strategies for this transitional phase in the Region.

This document is the product of an internal discussion within various units of the Pan American Sanitary Bureau with responsibilities in child health, and is submitted for consideration. Recognizing that both a multidisciplinary approach and multisectoral actions are necessary for promoting integral child development, it concentrates insofar as possible on the health sector and its contribution towards this integrated effort. The document begins with an analysis of the current situation and develops a frame of reference for the reorientation of efforts to achieve child health (based on evidence from the different disciplines). Suggestions for strategies and lines of action are presented, together with projections of expected results. Finally, the role of PAHO is defined, accompanied by estimates of the cost involved.

The present document is submitted to the Executive Committee for review and discussion. Members of the Committee are requested to provide guidance, with a view to establishing the direction and priorities of PAHO in this area.

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## 1. Introduction

The health situation of children aged 0-10<sup>1</sup> in the Americas has steadily improved as a result of social, economic, environmental, and technology development, communicable disease control, and greater coverage and quality in the health services. However, the challenge of unsolved problems and unaddressed issues must be met in order to develop a generation of healthy, happy children able to contribute to their own well-being and that of their families, societies, and nations.

A decade after the World Summit for Children, it is necessary to view the situation within the context of the demographic, epidemiological, economic, social, and political realities of the Region of the Americas.

The foundations for integral development are laid during preconception, gestation, birth, breast-feeding, preschool, and primary school. These produce an impact on the health and environment of the individual that lasts throughout life. It is known that the interaction among biological, psychological, social, environmental, economic, cultural, and political factors, as well as with the more immediate environment, determines the susceptibility to illness, and strengthens those factors that protect against disease.

Given the demonstrated impact of promoting integral development in the early ages, there is a consensus that the best and most profitable social investment is that which is made in children. The health sector, in collaboration with other sectors, has a window of opportunity to take the lead and to help to set priorities, investing in a better future through healthy children.

This document analyzes the current child health situation and the services designed to serve this population. It offers a frame of reference that can serve to reorient efforts, based on evidence from various disciplines. It also offers some strategies and lines of action necessary for promoting the integral health and development of children, furnishing projections of expected results. The document concludes with suggestions to begin the process of drafting a Regional Plan, operationalizing the projected role of the Pan American Health Organization (PAHO) and estimates of the costs involved.

The Executive Committee is requested to review and discuss the document and provide orientation for the direction and priorities of PAHO in this area.

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<sup>1</sup> The United Nations defines children as 0-18 years and adolescents as 10-18 years. WHO further subdivides the group into early childhood 0-10 years and adolescents 11-20 years. Because PAHO already has a policy on adolescents (Directing Council Document CD40/21, September 1997), this document will concentrate on children 0-10 years of age.

## **2. The Region of the Americas: Analysis of the Child Health Situation**

### **2.1 *Demographic Situation***

There has been a significant decline in population growth, although overall, children still constitute the majority of the population in many countries with higher concentrations in rural areas. Growing migrations from rural areas to the cities have resulted in chaotic growth. As a result, children often have little access to basic public services, living in conditions marked by overcrowding and poverty and exposed to a wide variety of social risks and abuse. Armed conflicts and natural disasters have contributed to this precarious situation. These demographic trends are generating ever smaller, dispersed and more nuclear family groups, with a consequent reduction in available social support networks.

### **2.2 *Epidemiological Situation***

#### **2.2.1 *Mortality***

Every country in the Region has reduced its infant mortality rate, although the profiles vary. Despite a significant decline in the past 40 years many gaps are still evident demonstrating inequities, for example, infant mortality from communicable diseases is 10 times higher in the Latin American and Caribbean Region than in Canada.

Evidence is available that infant mortality is higher in impoverished and rural areas but we also know that it is up to 300% higher in children whose mothers have no schooling. Deaths from perinatal disorders are closely linked with maternal and fetal malnutrition, for example. Neonatal and fetal infections, premature rupture of the membranes, prematurity, chronic hypertension, dystocia, iatrogenesis, and neonatal fetal hypoxia, also figure prominently in accounting for child mortality. Poverty influences health outcomes disproportionately.

The leading causes of death in children aged 1 to 4 are communicable diseases and accidents. External causes and congenital diseases are relatively higher in countries that already have low levels of infant mortality. Communicable diseases associated with malnutrition are more prevalent in countries with high mortality, although external causes are significant. Accidents also constitute the leading cause of death in children 5 to 10 years of age, with a sharp rise in the trend.

### 2.2.2 Morbidity

The information on morbidity is based on the cases identified in the health services. This is only part of the picture for various reasons. There are no projections for the unserved population nor do the mortality figures show what accidents represent in terms of services, costs, and disabilities. For every pedestrian death in children aged 1 to 14, for example, 16 children in this age group have been treated in a health facility or an emergency center.

From the information available, it is known that acute respiratory infections (ARI) and acute diarrheal diseases (ADD) are still the principal illnesses affecting children. Septicemia, meningitis, malnutrition, and malaria are major causes of morbidity in some countries (accounting for some 50% to 95% of consultations and hospitalizations). The strategy for Integrated Management of Childhood Illness (IMCI), implemented in 19 countries of the Region, has been a relevant factor in reductions in the majority of the indicators of communicable disease.

Immunizations have saved many lives throughout early childhood. From 1977 to 1999, the immunization coverage for children under 1 year of age increased from 25% to over 80%. In 1971, the Region of the Americas was the first region to eradicate smallpox; the eradication of poliomyelitis followed in 1991, and the Region is on the verge of eradicating measles by the end of the year 2000. The majority of the countries administer six vaccines to prevent the major diseases responsible for morbidity and mortality in the Region: poliomyelitis, whooping cough, tetanus, measles, diphtheria, and tuberculosis. Progress has been made in the introduction of other vaccines to prevent rubella and congenital rubella syndrome, as well as *Haemophilus influenzae* type B (Hib) and hepatitis B infections. The impact of immunization is increasing with the incorporation of the Hib and the triple viral vaccine (measles, mumps and rubella) in the routine vaccination programs of the majority of the countries of the Americas.

Other emerging causes of morbidity in the Americas are troubling. The percentage of pediatric AIDS cases in the cumulative total of cases reported in the Region is 1.8%. A principal reason for consultation at the primary care level is dental health. An estimated 90% of children between the ages of 5 and 14 have caries, and around 50% suffer from inflammatory gum disease. Of concern are early vision and hearing losses. Often these are discovered through screening in schools when the results of early neglect have already resulted in serious problems for the individual's development.

### **2.3 *Nutritional Situation***

An estimated 8% of newborns in the Region are of low birthweight, which is closely associated with neonatal mortality or the risk of stunted growth and development. Some studies suggest a relationship between low birthweight and a higher prevalence of chronic noncommunicable diseases in adulthood. Although retardation in children under 5 is difficult to measure, an estimated 20% are affected—especially children under 2 years.

Strategies to promote breast-feeding have increased the number of mothers who breast-feed their children; 90% of newborns are now breast-fed. However, the proportion of women who breast-feed for the recommended four to six months is much lower. Anemia continues to be a serious problem in the Region, with a range of 20% to 60% prevalence in pregnant women and children under 2. Vitamin A deficiency is a problem requiring urgent attention in Brazil, the Dominican Republic, Guatemala, Peru, El Salvador, and Mexico. Since 97% of the countries have iodized salt, iodine problems are related to sustainability and surveillance. Some countries have begun to fortify food products with folic acid.

Food production and distribution continues to present problems which further widen the equity and developmental gaps for some countries.

### **2.4 *Child Labor, Mental Health, Violence, Abandonment, and Abuse in Childhood***

Early entry in the workforce is an emerging problem in the Region, especially in rural areas. An estimated 20 million children under the age of 15 are working, more than half of them less than 10 years old. Ten per cent of these children work in the formal sector where, at least in theory, they would have access to services. In addition to locking children out of the educational system, child labor intensifies inequalities in childhood development, exposing children to sexual abuse, mistreatment, increases risk of accidents, delinquency, and risky behaviors (smoking, drugs, sexual activity). Additionally, depriving children of educational opportunities signifies that they will earn an overall 20% less income compared to their peers with greater educational accomplishments.

Studies note the presence of depression, passivity, sleep and eating disorders among children. Although little systematically collected information is available on child abandonment and child abuse, many countries are beginning to be concerned about the growing number of children who are not in the school system or who have no direct

support networks—the so-called “street children.” While their numbers are difficult to estimate, it is known that they are subject to many physical, psychosocial and environmental risks that affect their growth and development.

Violence, both intra-family and social, and other public health problems such as smoking and drug abuse, continue on the rise in some populations, not only impacting the health of the children involved but their future children since there is evidence that abused children repeat the cycle with their offspring. Sexual abuse is beginning to be recognized as a public health problem with the proportion of girls abused increasing from the age of 5. Every day children are drawn into pornography, which has increased with global communication; and the fear of contracting AIDS has promoted and intensified the sexual demand for boys and girls.

Children with disabilities are often deprived not only of services, but also of their rights. Although data is scarce, there continue to be anecdotal reports of isolation and abandonment of children who are not considered “normal.”

## **2.5 *Environmental Problems***

The traditional environmental health risks associated with poverty and underdevelopment are those related to the lack of drinking water and excreta disposal services, indoor air pollution, and food contamination. Modern life has brought with it other risks, such as the dumping of hazardous solid waste, air pollution from toxic industrial or vehicle emissions, the pollution of water resources with industrial waste, the improper use of chemical or radioactive substances linked with new technologies, traffic accidents, and climate and atmospheric changes, such as the thinning of the ozone layer and the greenhouse effect. All these factors affect the health of the general population, but their effects are more intense in the most vulnerable groups, especially in young children.

## **2.6 *Health Services***

The majority of the countries in the Region are in the process of health sector reform and political-administrative decentralization, and are experiencing paradigmatic conflicts between the traditional curative care and health promotion and disease prevention. With few exceptions, the health services respond to the spontaneous demand generated by morbidity with an eminently individualistic biomedical, curative, and depersonalized approach to providing care. Preventive activities for children center basically on immunization, while program elements of health promotion and early detection of problems in growth and development continue to be rare. In some systems, health promotion activities are conducted separately from curative and preventive activities, resulting in missed opportunities.

The response capacity of the primary health care level is relatively low. Several studies indicate that a lack of confidence in the system or the quality of services reduces their utilization. Deficient referral and counter-referral systems hinder the continuity of care, evidenced by disjointed service networks and difficult access to the levels of greater complexity. These difficulties affect particularly the population sectors with fewer resources.

The adoption of immunization and the IMCI strategies has strengthened the health services in epidemiological information, planning, and evaluation. In addition, they have emphasized the role of children as consumers of health services and providing care to children in health service operations. Immunizations and the monitoring of growth and development prompt mothers to bring their children for regular visits to the health services during their first year of life. However, after the first year of life, children's contact with the health system is only occasional and motivated by episodes of acute morbidity. In the critical period of child development, ages 1 to 5, the health systems offer no programmed care.

In short, the child health situation in the Region is critical. Transition processes are responsible for maintaining significant morbidity and mortality gaps between and within countries, and new problems linked with socioeconomic development are emerging, with repercussions for physical and psychosocial environments. Although in the reform process, the health systems have focused on financial aspects, much remains to be done with respect to the organization and operation of the services and their role in promoting the health and well-being of children. The evidence points to the need to reorient the health services toward more integrated activities for children and families, accompanying them throughout the life cycle.

### **3. Political-Conceptual Framework of Child Health**

#### **3.1 *International Agreements***

Child health in the Americas represents an important challenge, not only because of the existing morbidity and mortality, but because it is an active ingredient in promoting the human development of children and because it is key to progress toward equity and development in the Region in the global sense. There is no doubt about the need to continue the struggle against disease through prevention and treatment, however, we must also incorporate into the health sector repertoire, strategies which promote child health and development.

The World Summit for Children, held in 1990, was a critical milestone in the efforts to improve the health and living conditions of children around the world. The



commitments established at the Summit target child health, nutrition, and education, as well as the environment. In the Region of the Americas, these goals have been reiterated and expanded in the development of the Regional Plan of Action and in the interministerial follow-up meetings held in Mexico (Declaration of Tlatelolco, 1992), Colombia (Nariño Commitment, 1994), Chile (Santiago Agreement, 1996) and Peru (Lima Agreement, 1998). The Governments of the Region, moreover, have made a commitment to implement the agreements entered into at the World Conference on Human Rights in Vienna (1993), the International Conference on Population and Development in Cairo (1994), the World Summit for Social Development in Copenhagen (1995), and the IV World Conference on Women in Beijing (1995).

The majority of the countries of the Region have ratified the International Convention on the Rights of the Child, which is the ethical and legal framework for implementing public policy on children and adolescents. They have also called for the elimination of all forms of discrimination against women, an aspect that has an enormous impact on child health. In addition, the agreements on health promotion (Ottawa 1986, Jakarta 1997) laid out clear and feasible guidelines for dealing with the complexities of achieving health for all.

PAHO has supported all of these declarations and in November 1999, gave added emphasis to intensifying efforts in child health through the inauguration of “Healthy Children: Goal 2002.” This initiative supports a campaign to reduce child deaths by an additional 100,000 by 2002.

### **3.2 *Evidence and Lessons Learned***

Each stage of the child’s life cycle, from preconception, through pregnancy, infancy, preschool, primary school, and preadolescence, contributes to optimal development. They become part of a continuum, where omissions or harm in an earlier stage adversely affect the capacity to progress to subsequent stages and, conversely, achievements lead to more and better development.

Pregnancies complicated by maternal ill health tend to be associated with newborn morbidity and later childhood mortality. Recent studies are demonstrating an amazing correlation between intrauterine conditions and lifetime propensities for different diseases. Birth weight as a proxy for the maternal conditions during pregnancy has been used to demonstrate propensity to allergies, diabetes, hypertension and high cholesterol, brain, liver and kidney functioning, and susceptibility to developing breast cancer and obesity. Many of these effects, although correlated with intrauterine events, do not appear until mid life.

Central nervous system development not only in the prenatal period but also in the first years of life has been linked with nutrition, care, emotional ties, and environmental stimuli. In contrast, negative experiences, including severe neglect, the lack of stimulation, or inappropriate stimulation, have irreversible effects on optimal development. The neurosciences have now provided confirmation that this early development is a determinant of later health related findings, such as cognitive and social development and stress tolerance abilities.

A three generational study in the Institute of Nutrition of Central America and Panama (INCAP) demonstrated the efficacy of protein-caloric supplements in pregnant women. The offspring of these women were larger at birth and had less infections than others. The exceptional finding was that, without further interventions, the second generation, i.e. the grandchildren of the woman supplemented were shown to have the same advantages. Furthermore, interventions at this point in childhood have been shown to have a potentiating effect if combined, as, for example, in McGregor’s work in Jamaica which combined nutrition and stimulation approaches for greater gains than with either strategy alone.

Developmental studies have shown that attitude formation is initiated in the early years of the person’s lifetime. Long before children arrive at school age, they have learned about relationships and formed attitudes regarding behavior and lifestyle. Behavior patterns which are fixed by 7 years of age have been shown to be significantly influenced by parental attitudes and behavior, especially the parent/caregiver with whom the child spends more time. (Table 1 gives examples of some of the psychosocial factors identified in the literature as direct contributors to the health and well-being of children and for which strategies can be developed.)

**Table 1: Psychosocial Factors that Contribute to the Health and Welfare of Children**

Level	Psychosocial Factors	
	Risk Factor	Protective Factor
Individual	Hostility, desperation, low self-esteem, alexithimia, low self-sufficiency	Resiliency, high self-esteem, self-sufficiency, coping mechanisms
Family	Divorce, limited support network, family dysfunction, violence	Resiliency, communication, sense of humor
Community	Alteration of cultural patterns and lack of shared history in periurban settlements Lack of social cohesiveness	Social support networks Organized community Resiliency, empowerment (level of participation)

Supplemental early and school feeding programs have demonstrated successes in height and weight gains, verbal and math skill acquisition, and in decreasing anemia. Educational data have demonstrated that parental involvement in schools is important in child achievement. Logical extension would involve caregiver participation in the activities of the health sector. Indeed, IMCI strategies have expanded to incorporate training of parents and communities in the initiative. Energy available through population based dietary gains has been directly related to economic growth in England.

Recent research shows a direct relationship between the health status and well-being of an adult man or woman and their capacity to deal with problems, their resiliency, self-esteem, confidence, respect, and self-sufficiency. There is strong evidence that such competencies are acquired in the initial years of life. One often cited example of this is the U.S.-based Perry Preschool Project. This program is a longitudinal experiment with over 30 years of experience studying the effects of preschool education that addresses health, educational and social needs of the child. The results reveal the psychosocial and economic benefits of early intervention. In adulthood, study participants demonstrated better academic and social behavior, obtaining better jobs and higher incomes. In economic terms, the study showed that the investment would yield seven times its value in savings in expenditures for social welfare services, special education, and justice. In this Region, Brazil, in projecting governmental program costs, concluded that integrated preschool programs are a sound economic investment.

Data from Mexico demonstrate that early and intensive intervention with individuals and families of children with diagnosed developmental difficulties can achieve recuperation of functional abilities in many areas over a period of several years. We also have evidence that even short term interventions at early school age reduce adolescent and young adult antisocial behavior, depression, and hence personal and system costs.

Experiences in most countries trying to implement imported programs have re-emphasized that the individual characteristics of each child and its family, community and physical and psychosocial environment must be taken into account for real change to occur. The construction of a common frame of reference and guidelines for quality programs with sufficient flexibility for local and regional adaptations has repeatedly been shown to be the most effective intervention.

Since early childhood development has been shown to be one of the indicators most sensitive to not only income differences (up to the point of meeting basic needs), but also to the degree of inequities present in the particular setting, the equity factor is extremely important. In this respect, there is a running debate on the desirability of targeting the specific groups at greater risk of illness because of their biological

predisposition, socioeconomic status or ethnic, cultural, and geographical characteristics. This targeting has been successful especially when it comes to addressing health problems based on epidemiological information. It has contributed to the identification and correction of inequities in service delivery. However, this approach can result in a compartmentalization of services emphasizing illness rather than health if not properly designed.

Research and experience suggest that broad-based community interventions are the most adequate in the majority of themes, accompanied when necessary, by specific reinforcement for those families or individuals identified as being at greater risk. One interesting finding for the development of programs has been the effectivity of the home visiting elements in a number of projects. It apparently provides a more realistic approach to the needed changes and assists in developing a mutual trust relationship between the project personnel and the parents/caregivers.

Childhood, in view of the evidence provided, is a single irreplaceable opportunity for acquiring the tools necessary for maximum development of potential and the achievement of optimal health status during a person's life cycle. Reducing poverty and inequity in the Region will require making integral child development a priority in public and private policies. There are valid moral, technical, social, and economic reasons to prioritize children's health and well being. We have the theory and the evidence to proceed. It is now time to make the social and political choices that break the cycles of illness and inequity and move towards a new paradigm which will emphasize early beginnings to integral child development.

### **3.3 *Conceptual Framework: Proposal for Integral Child Development***

Over the years, the Pan American Health Organization has promoted strategies that have led to improvements in the health and well-being of children. The emergence of new problems and scenarios, the recognition of the complexity and variety of health determinants, call for changes. The examination of new knowledge, the successes and failures of past strategies, as well as the rising levels of expectation for well being of the children of the Region have demonstrated that the health of children is a good investment.

PAHO proposes to move forward with a model for integral child development (ICD), with health as the centerpiece. ICD is understood as the exercise of citizen's rights towards the highest possible quality of life and full human realization during this specific moment of the life cycle. This implies linking the current models of approach to risk and illness with health promotion and developmental approaches in order to build a bridge to the new biopsychosocial paradigm. To achieve this, it is essential to adopt a multidisciplinary approach and create a culture of health in the population, turning it into

a value and standard, with a vision of health as a positive evolutionary and participative process. We believe that the health sector can take the lead, joining with other sectors and institutions in a synergistic effort, and placing the child and family development permanently on the public agenda.

The proposed model involves a multi-entry point and reinforcing approach. Programs and services which address only one level, be it the individual, family, community or population, will not bring about the needed changes. Each point of entry must be addressed with its own specificity in order to develop ICD.

At the individual level, this implies the integration of biopsychosocial aspects, and the joint programming of promotion, prevention and provision of curative services. For the family,<sup>2</sup> it implies cognizance of the importance of a safe and secure environment for healthy development as well the recognition of different forms of “family,” and the expansion of the number of immediate reference groups as the child grows in age. The community, we have recognized, has an important role valuing health and assuring its place on the public agenda. Sustainability, another important element in achieving ICD results, comes through community ownership of the programs, and ownership is achieved by involvement. The development of information networks throughout the different sectors and sources of support is a critical role for the community in promoting ICD; often parallel activities occur without synergy, which the network development could avoid. Social communication must be a part of the strategies applied to make sure that all people are involved in the creation of a culture of health. At the population level, the stimulation of child and family friendly policies together with advocacy for taking a developmental approach to promoting healthy children becomes priority.

The family is the most powerful group for the social and emotional development of the child. Many studies have emphasized that a child’s relationship and interactions with parents/caregivers in the first years of life have a decisive impact on his/her development as a human being, capacity to learn and to regulate and moderate emotions, behavior, and risks of falling ill. Many families today are under stress due to serious inequities, competition, individualism, migration from the country side to the city, monoparental situations, inadequate social support systems, and lack of social cohesiveness. It is necessary, then, to develop family strengthening activities to promote child development. Evidence also points to the need to support and advocate with other caregivers/grandparents and to include peer groups as children age.

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<sup>2</sup> Family, in this document, is understood as the functional group which provides the basic economic, emotional, social, and physical support and environment. In many countries of the Region, these functions are being assumed by persons who do not conform to the strict structural definition of family, i.e., mother, father, child.

For children to reach optimal integral development, it is essential to provide them with healthy environments, including the culturally appropriate physical and psychosocial elements that, in interaction with each other, have been shown to have a positive impact on health and well-being. The efforts must start early and continue throughout the life cycle. The concept of ecology in development has been posited as a form of interaction in which the developing individual actively participates, for example, in the home, the school, and the neighborhood. These systems are interconnected and are powerful determinants of the integral development and health status of the child throughout life. With active participation, the child ceases to be a passive receiver of actions or incentives, becoming instead a proactive agent in his/her environment. The health sector will need to systematize multiple entry intervention points, at the individual, family, community and population levels which reinforce each other towards child well-being. (See Table 2 for an example of activities that could be emphasized at different points in the cycle of childhood.)

### **3.4 *Expected Results***

If this framework were to be implemented in the countries of the Region, changes in several areas could be expected. There would be improved knowledge bases, a work force competent in implementing a developmental approach to children in whatever setting they were encountered, who also demonstrated understanding of the importance of family and community actions to reinforce a culture of health. A process of policy revision would have been initiated to protect the rights of all children and services instituted to that effect. There would also have been increased efficiency as a result of combined intersectoral actions, and evidence of the application of social communication in involving the population in activities to promote integral child development.

## **4. Suggested Directions for Implementing Integral Child Development**

To operationalize this framework, it is necessary to develop a Regional Plan of Action that would model integration as the focus for activities to stimulate the realization of potential. This would require not only the involvement of multiple disciplines and sectors, but also the re-enforcement of the core messages through the multiple entry points. The following sections will present principles, strategic objectives and lines of action which are critical to the development of that plan. They will need to be reconfirmed, discussed, added to with additional evidence, and further developed into a concrete proposal for the Region through a participatory process.

**Table 2: Examples of Interventions and Results**

	Preconception	Prenatal	Birth	0-3 years	3-6 years	6-10 years
Examples of interventions	<ul style="list-style-type: none"> <li>• Education in healthy sexuality.</li> <li>• Education in family and development.</li> <li>• Support and counseling in healthy lifestyles.</li> <li>• Strengthening of participation</li> </ul>	<ul style="list-style-type: none"> <li>• Support and education in pregnancy that involves the father.</li> <li>• Prenatal screening.</li> <li>• Evaluation and monitoring of psychosocial aspects such as mental health, violence, isolation, emotional deprivation, substance abuse.</li> <li>• Maternal nutrition: education; Iron, folic acid supplementation.</li> <li>• Preparation for breast-feeding.</li> <li>• Oral health; treatment of infections</li> </ul>	<ul style="list-style-type: none"> <li>• Care in childbirth.</li> <li>• Involvement of the father.</li> <li>• Physical and psychosocial screening of newborns.</li> <li>• Support and promotion of breast-feeding.</li> <li>• Immunization.</li> <li>• House calls.</li> </ul>	<ul style="list-style-type: none"> <li>• Evaluation and monitoring of integral growth and development.</li> <li>• Immunization.</li> <li>• Support and education for parents or caretakers.</li> <li>• Facilitation and strengthening of social support networks.</li> <li>• Necessary referral to more complex medical and psychosocial levels.</li> <li>• Interaction with the day-care system.</li> <li>• Screening and referral for oral, vision and hearing problems.</li> <li>• IMCI.</li> </ul>	<ul style="list-style-type: none"> <li>• Continuing of ICD monitoring.</li> <li>• Permanent synergistic interaction with the preschool education system.</li> <li>• Immunization.</li> <li>• Timely investigation of developmental disorders.</li> <li>• Referral, if necessary.</li> <li>• Strengthening of protective factors for individuals, families, and communities – psychosocial factors of self-esteem, resiliency, self-sufficiency, etc.</li> <li>• Screening and referral for oral, vision and hearing problems.</li> <li>• IMCI</li> </ul>	<ul style="list-style-type: none"> <li>• Continuing of ICD monitoring; emphasis on learning disabilities, hearing and vision impairment, osteo-articular and emotional disorders.</li> <li>• Immunization.</li> <li>• Necessary referral for resolution of the problems investigated.</li> <li>• Incorporation of health promotion contents into curriculum matrices and into the global policy of the educational establishment (healthy schools).</li> <li>• Oral health monitoring.</li> </ul>
Examples of results	<ul style="list-style-type: none"> <li>• Planned, wanted, and healthy conception.</li> <li>• Reduction of unwanted pregnancies.</li> <li>• Healthy choices.</li> <li>• Exercise of citizenship.</li> </ul>	<ul style="list-style-type: none"> <li>• Prevention of smoking, and alcohol and drug use.</li> <li>• Healthy pregnancy.</li> <li>• Pregnancy to term.</li> <li>• Healthy women.</li> </ul>	<ul style="list-style-type: none"> <li>• Healthy newborns with adequate birthweight.</li> <li>• Safe and healthy spaces.</li> </ul>	<ul style="list-style-type: none"> <li>• Adequate physical and psychomotor development (ICD).</li> <li>• The family is welcomed, protected, and supported by the health system.</li> <li>• The family becomes part of the social network and participates</li> </ul>	<ul style="list-style-type: none"> <li>• ICD in the best conditions.</li> <li>• Satisfactory incorporation in the school system.</li> <li>• Timely care of the disorders found through screening.</li> <li>• Family involved in the child's development and health.</li> </ul>	<ul style="list-style-type: none"> <li>• Schoolchildren with good academic performance.</li> <li>• Schoolchildren aware of the role of health in their future lives.</li> <li>• Schoolchildren who have not acquired unhealthy habits such as smoking or alcohol and drug use.</li> <li>• Schoolchildren with social skills.</li> <li>• Healthy children.</li> </ul>

**4.1 *Basic Principles for the Development of a Strategic Plan for the Americas in Integral Child Health***

- Full respect for the rights of the child, as expressed through policies and strategies.
- Consideration of childhood as a unique window of opportunity to begin health promotion, disease prevention, and development for health throughout the life cycle.
- Articulation and development of synergy between the health sector and other developmental sectors, such as education, housing, labor, agriculture, the economy, and planning.
- Interdisciplinary application of knowledge from the health sciences, behavioral sciences, and social, political, and economic sciences.
- Reorientation of the health services to include:
  - strengthening and capitalizing on the advances made through disease prevention and the relationships established between the population and the health services to expand and include health promotion and risk prevention in all of the contacts with individuals, families and communities;
  - recognition of the need to take an individual and collective approach with a family emphasis, and to do this in a consistent and continuous manner;
  - extension of health promotion activities to include promoting health in the daily environment of the child and its parents which could include, for example, visits to the child’s home to combine environmental assessment, teaching of parents and family, and individual attention to the child;
  - adoption of appropriate technologies; for example, the inclusion of new vaccines in routine vaccination schedules, as well as technologies to improve health service delivery.
- Utilization of multiple forms of social communication to strengthen the messages directed at children, families and communities. These should emphasize the partnerships with the health services towards creating a culture of health for all, and advocate for the development of healthier generations for the future.



## **4.2 *Strategic Objectives to Consider in the Orientations of PAHO and its Member States for Integral Child Health and Development***

### **4.2.1 *On Inequities***

Contribute to the regional effort to eliminate poverty, creating conditions within the family and the community to interrupt the poverty cycle early on. Work to reduce inequities among children based on their socioeconomic level, gender, or ethnicity, through joint activities for disease prevention, health promotion, and integral development. Mobilize resources from different areas and sectors for the implementation of child health policies.

### **4.2.2 *On the Public Agenda***

Place integral child health and development on the countries' agendas, adopting it as State policy, strengthening local leadership and developing strategic partnerships that facilitate synergy and complementarity. Take advantage of the window of opportunity presented this year through various international meetings focussed on the child and youth to stimulate reflection and the development of plans, programs and policies that promote integral child development. Participate in the evaluation of the World Summit for Children 2000 and in the design of proposals and goals for the next decade, considering the new, conceptual and promotional framework. Utilize social communication methodologies for advocacy and to raise awareness among the population at large.

### **4.2.3 *On the Health Services***

Emphasize technical cooperation, reorientation of the health services and care models, the strengthening of multidisciplinary and intersectoral activities, and empower families and communities to work with the health sector in the prioritization of problems and the planning, execution, and evaluation of activities in child health. Develop a policy of pro-active positioning of the health sector vis-a vis the target populations.

## **5. *Implications for the Implementation of the Paradigm Shift towards Integral Child Development***

Implementation of a Regional Plan for Child Health under the proposed conceptual framework requires innovative efforts and actions that will permit a qualitative leap toward integral child health and development, within a framework of consistency, complementarity, and synergistic collaboration among all those working to

improve the health and quality of life of children. Several areas have been highlighted: human resources development, continued advancement of knowledge, plans, programs and services and the mobilization of resources, all of which will play an important role.

### **5.1 *Human Resources Development***

To be able to rely upon a well qualified work force, the personnel comprising the health sector workforce must have opportunities to develop, and move towards the new paradigm. In the spirit of participation, opportunities must be made available to parents and communities as well. This would minimally include: (a) the development of ICD content in undergraduate and graduate programs for health and social sector professionals; (b) continuing education programs that employ various on-site and distance learning methodologies to provide in-service training; and (c) educational and incentives programs for parents, civil authorities, labor organizations, and other extrasectoral teams.

### **5.2 *Continued Knowledge Advancement***

The knowledge bases are increasing, however, this paper has identified a number of areas in which gaps still exist. In addition, the implementation of a new model must be closely monitored so that lessons learned can be shared. As part of the information strengthening and research agenda for the implementation of the framework, the following should have priority: (a) completing the knowledge gaps on the integral relationships between health and development and early intervention, especially targeting the question of inequities and development of indicators for ICD; (b) contributing to the enrichment of the conceptual framework through case studies of significant achievements stemming from the implementation of public social policies, for example; and (c) improving epidemiological databases and their use, including additional information that contributes to the development of an integral view of children (psychosocial, family aspects, etc.).

### **5.3 *Plans, Programs and Services***

The process of changing the paradigm has already started in many areas. The plans, programs, and services should emphasize the following:

- Strengthening the comprehensiveness of interventions by disseminating the conceptual framework and supporting the countries in the reorientation of services as well as the use of evidence-based and cost-effective methodologies and interventions.

- Providing neglected groups access to the services system, i.e., the disabled; children with chronic diseases; groups disadvantaged because of their socioeconomic level, gender, or ethnicity; and marginalized individuals (street children, institutionalized children, etc.).
- Strengthening information systems and developing indicators that allow monitoring and evaluation of integral child health and development.
- Promoting and strengthening public policies and educational strategies, improving access to preschool and adult education, with literacy plans geared to women.
- Preparing and applying models for implementation and evaluation of the proposed strategies. For example, support Bolivia, Ecuador and Peru in the evaluation of universal maternal and child insurance schemes.
- Preparing, reviewing, and adapting technical support materials (technical standards, guidelines for action, specific instruments, etc.).
- Supporting and promoting preventive activities with a demonstrable impact on public health for example, new vaccines such as *Haemophilus influenzae* (Hib), hepatitis B, and rubella.

#### **5.4 Mobilization of Resources**

The Region is enjoying some of the highest levels of investment in social development in history. In order to develop ICD and achieve the results expected, effective investment and mobilization of resources will be necessary. This will involve policy decisions on the number, type, and distribution of personnel, the types and timing of services to be offered, and the priority given to the traditional functions of the health sector and those which will embody the application of the new paradigm. Studies have shown that this can be economically as well as theoretically possible. Resources matter and often make the difference between desires and reality. New ways of operating and incorporating other sectors should be found. Public/private partnerships either through philanthropy or through cooperative projects, can catalyze actions. Businesses should be encouraged to establish family friendly environments such as job sharing and on-site child care. At all levels, parents, local areas, communities, nationally and internationally, there must be a realization of commitment to children, now and for the future.

## **6. Role for the Pan American Health Organization**

At PAHO, coordination among the various units with an interest in child health will be necessary. The cross-disciplinarity and variety of areas (individual, family, community, environment) involved in integral child development and health make the Division of Health Promotion and Protection the ideal focal point for this effort to coordinate joint initiatives, optimizing resources and opportunities and thus avoiding a duplication of efforts. Undertaking this process jointly with the countries requires the presence of a permanent Regional Adviser to assist the countries in developing their policies, plans, and programs. It also requires the incorporation of high-impact technologies, the building of strategic partnerships, human resources development, and the mobilization of sufficient resources to achieve the proposed objectives.

The preliminary estimate for additional resources needed to reinforce the PAHO biennial program budget allocation, in order to be able to provide the personnel and perform the activities necessary to “jump-start” a Regional Plan, is US\$ 1,000,000. This would permit activities for consolidation, start-up, and support of the development and initial implementation of the Regional Plan for Child Health. Once this first stage is consolidated, project and program proposals will be prepared and submitted to the international community to sustain and expand the efforts.

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