

INTEGRATED VISION FOR VITAMIN A SUPPLEMENTATION IN THE AMERICAS

2 - 4 May 2001
Managua, Nicaragua



Regional Meeting Report



FOOD AND NUTRITION PROGRAM/DIVISION OF HEALTH PROMOTION AND PROTECTION
DIVISION OF VACCINES AND IMMUNIZATION/EXPANDED PROGRAM ON IMMUNIZATION
INTEGRATED MANAGEMENT OF CHILDHOOD ILLNESS/
DIVISION OF DISEASE PREVENTION AND CONTROL
Pan American Health Organization
Washington, D.C.

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BACKGROUND

Vitamin A deficiency (VAD) is not only the single most important cause of childhood blindness in developing countries, but even at subclinical levels, also contributes significantly to the high morbidity and mortality rates from common childhood infections. In the Region of the Americas, vitamin A deficiency prevails as a widespread subclinical disease in many countries, where more than a quarter of all children under five years of age is estimated to be affected by VAD.

Vitamin A supplementation is one of the three interventions, along with food fortification and dietary diversification, for combating this problem at the public health level. It is a low-cost, highly effective means of rapidly improving the vitamin A status and health of children. Periodic high-dose vitamin A supplements have a dramatic multiple impact on the health of young children, reducing the risk of all-cause mortality by about 23%, measles mortality by 50%, and diarrheal disease mortality by about 33%. WHO recommends that children 6-11 months of age be provided 100,000 IU of vitamin A, children above one year be given 200,000 IU of vitamin A every four to six months, and mothers should be provided a single dose of 200,000 IU of vitamin A up to six weeks postpartum. With this understanding, all of the countries with VAD are already widely implementing vitamin A supplementation. However, the extent, progress and impact of this intervention in the Region were unclear until now.

In 1998, the Food and Nutrition Program (HPN) with the Division of Vaccines and Immunization (HVP) of the Pan American Health Organization embarked on a joint project for vitamin A supplementation through immunization contacts in six countries in the Region of the Americas. This project was conceived by the resurgence of discussions on vitamin A supplementation and particularly the logistical feasibility of integrating the program with the Expanded Programme on Immunization (EPI) in order to increase coverage. This strategy was reconsidered in light of the success of EPI in assuring high coverage of the population by establishing highly effective vaccine delivery systems for health services in the countries. This project, which was carried out through the aid of a grant from the Micronutrient Initiative of Canada, reviewed the situation of vitamin A supplementation in the six participating countries and implemented or reinforced supplementation programs to assure the proper and adequate administration of vitamin A to targeted children and postpartum women for two years. The countries that participated in this project included Bolivia, Brazil, Dominican Republic, Ecuador, Nicaragua and Peru.

The vitamin A supplementation project emphasized the implementation of essential programmatic elements in the six participating countries. Distribution through inter-programmatic coordination, training of health personnel at various levels, monitoring and supervision were reinforced. Given EPI's success in vaccination coverage, i.e. reaching near 90% coverage of children under one year of age in the Region with DPT, OPV, measles and BCG vaccinations, integrating vitamin A supplementation with immunization activities was promoted in order to increase supplementation coverage. Health workers from the central to the local levels were trained in techniques for handling vitamin A capsules, administration of supplements, data recording and registration. Particular focus was placed on the identification of an information system for collecting vitamin A supplementation data. Data recording and reporting were reinforced to avoid any possibility of overdosing, facilitate tracking of supplementation on health cards in order to complete the dosing schedules, monitor coverage and evaluate the effectiveness of the program in achieving its coverage goals. Although vitamin A toxicity due to excessive accumulation of vitamin A is extremely rare and its symptoms can be alleviated by simply removing the source of vitamin A, registering on the immunization or health card of the supplemented child or mother helps to avoid the administration of another high dose of vitamin A supplement within less than one month, the interval period when possible overdosing may occur. Data reporting is also extremely important for identifying the progress of the program in reaching the target population.

To review the lessons learned through the project over the two years and outline future integrated action to reduce vitamin A deficiency, a Regional meeting was held on May 2-4, 2001 in Managua, Nicaragua. Participants from ten countries in the Region were invited – six countries that participated in the two-year project, and four additional countries that currently have vitamin A supplementation programs and would allow a broader discussion on experiences and specific strategies to increase vitamin A supplementation coverage (see List of Participants in Annex 1).

From each of these countries, two to three participants were identified from within the Ministries of Health. The participants were professionals responsible for the Nutrition and Immunization Programs in each country, and the Integrated Management of Childhood Illness Program (IMCI) in the countries where the program exists. Each of these programs and the countries were well represented through the attendance of the various participants, except for Brazil, which was only represented by the single participant from the Child Health Program due to schedule conflicts of the other participants.

Objectives

The meeting had three objectives:

1. Evaluate advances and lessons learned in vitamin A supplementation in the Region;
2. Identify the strengths and weaknesses of the vitamin A supplementation programs; and
3. Identify strategies and a set of activities for strengthening routine supplementation, i.e. inter-programmatic coordination for multiple delivery systems, training needs, logistics, mobilization, monitoring and evaluation.

Methodology

Prior to the meeting, a comprehensive questionnaire on vitamin A supplementation was developed and disseminated to each of the participating countries (see Annex 2). The completed questionnaires were received before and during the meeting. Data from the questionnaires were used to develop country profiles and to update the situation of the intervention in the Americas. The countries also used the information to prepare their ten-minute presentations on proposed strategies for improving their ongoing vitamin A supplementation programs, which were presented during the meeting.

The meeting itself was divided into two main parts. First, the participants from each of the countries gave brief presentations regarding their specific lessons learned and suggested activities to strengthen their ongoing programs. Secondly, the participants were divided into three separate working groups to discuss three different topics related to the most problematic programmatic issues. Each of the working groups was given discussion guidelines that asked them to define the strengths, weaknesses and activities for improving the program in these three areas (see Annex 3 for the Meeting Agenda and Working Group Session Guidelines). Following the working group sessions, a plenary session was held to present the conclusions from each group. These conclusions were consolidated to form a set of recommendations and specific activities to be implemented for the Region, and they are presented in this report.

REGIONAL SITUATION¹

While no country in the Region of the Americas is identified as having clinical vitamin A deficiency as a public health problem, there are numerous countries that are categorized as having severe to moderate subclinical VAD as well as a few countries that have mild subclinical deficiency, and most all are currently implementing supplementation programs to combat this problem. And although two countries (Bolivia and Brazil) have been implementing vitamin A supplementation for over a decade, most countries started supplementation in the mid- to late 1990s.

With the recent years of experience in vitamin A supplementation, various programmatic advances have been achieved. Vitamin A supplementation is incorporated into immunization activities; there is more involvement of human resources from different health programs; supplementation of postpartum women is beginning to be included in the strategy; and there is increasing awareness to strengthen supplementation programs through integrated efforts and regular monitoring, as well as the growing awareness of the need to prioritize interventions to eliminate VAD. Yet, there are still many programmatic weaknesses that have been specifically identified and require strengthening.

Coverage

In all of the countries, the target population for vitamin A supplementation is children less than five years of age and, in several countries, postpartum women. Five out of the ten countries (Bolivia, Dominican Republic, Guatemala, Honduras and Nicaragua) that reported about their supplementation activities are currently providing national coverage, while the remaining five (Brazil, Ecuador, Mexico, Panama and Peru) are implementing focalized supplementation in specifically targeted high-risk areas in their countries.

For children 6-11 months of age, data from the years 1998-2000 show that the coverage rates for vitamin A supplementation in this age group are generally high across most of the countries, above 60% (Figure 1). This high coverage of children less than one year of age is likely due to their frequent contacts through regular health services that emphasize the early health attention for young children. In particular, this age

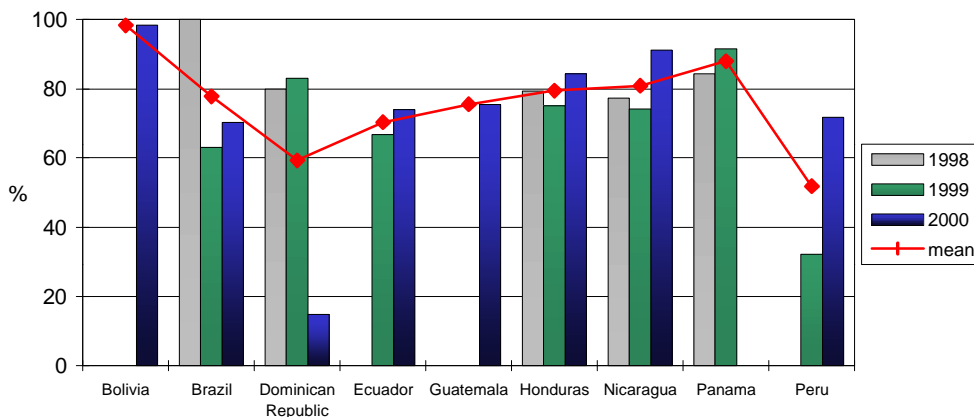


Figure 1: Trends in the coverage of vitamin A supplementation of children 6-11 months of age for the years 1998-2000 and the three-year mean percentages

¹ Information based on ten country reports from Bolivia, Brazil, Dominican Republic, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama and Peru. No quantitative data on coverage was included in the report from Mexico, since there is no information system for vitamin A supplementation in the country.

group coincides with the target group for childhood vaccinations, including the measles vaccine, which permits high coverage for supplementation to be achieved when integrated with these contacts. However, there are still some marked low coverage rates. These low rates for individual countries are likely attributed to one or more factors such as underreporting due to an irregular system of information, changes in the country's political and/or economic situation, unexpected environmental conditions and natural disasters, weak coordination during national campaigns, among others.

The coverage for the first dose of vitamin A per year for children above one year of age, on average, is not consistently as high as the coverage rates for children less than one year, as shown in Figure 2. Although a few individual coverage rates appear to reach nearly as high as those of the younger children, the three-year means for the first dose of vitamin A for the older children occupy a broad range from 34% to 75%, with several year- and country-specific rates even falling drastically below this range.

Reaching the targeted children for vitamin A supplementation becomes progressively difficult with age, as contacts with regular health services become less frequent. There are fewer opportunities to reach the older children through health service contacts, particularly after two years of age by when most vaccination schedules have been completed. Although most countries have identified children under five years of age as the target group of their Basic Health Security or Child Health programs which contribute to some of the achievements in coverage, there are still less effort and pre-existing channels in place for assuring full coverage of children above one year of age.

Even more dramatic than the decrease of coverage rates between children less than one year and the first dose per year for children above one year of age, are the rates for the second dose of vitamin A per year (Figure 3). With very few exceptions, the coverage rates for the second doses are extremely low. Only

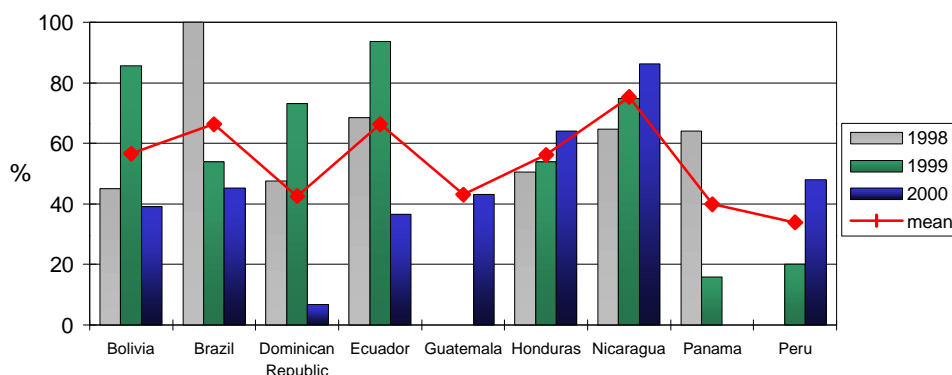


Figure 2: Trends in the coverage of the first dose of vitamin A supplements per year for children one year of age and older and the three-year mean percentages (1998-2000)

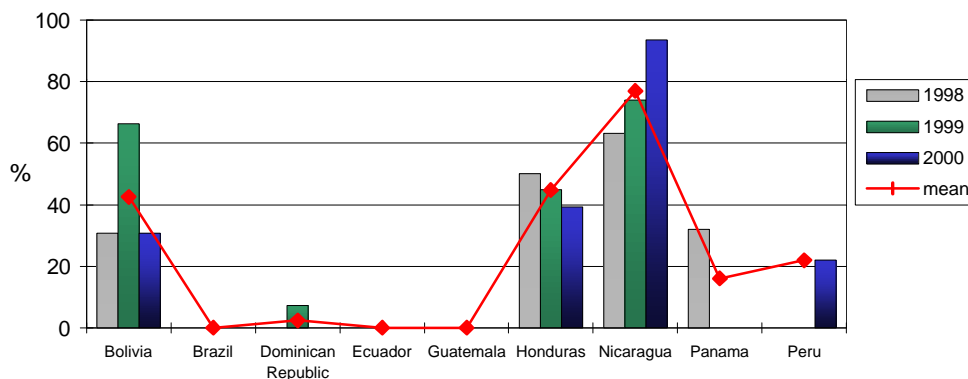


Figure 3: Trends in the coverage of the second dose of vitamin A supplements per year for children one year of age and older and the three-year mean percentages (1998-2000)

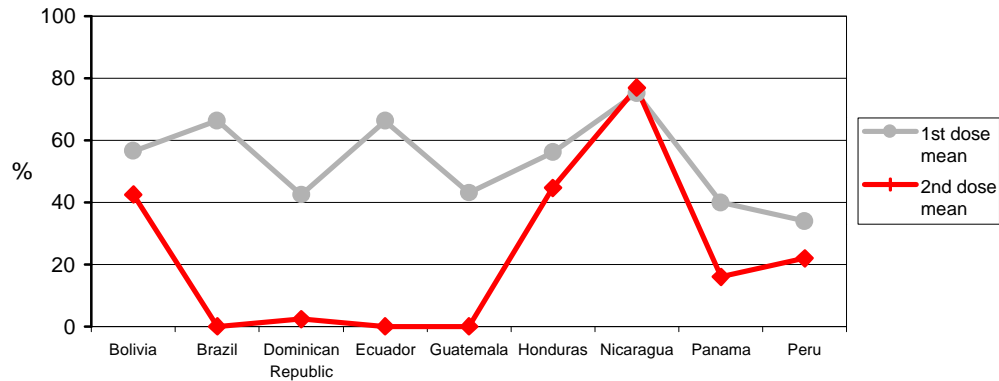


Figure 4: Three-year mean coverage rates for the first and second doses of vitamin A supplements per year for children one year of age and older (1998-2000)

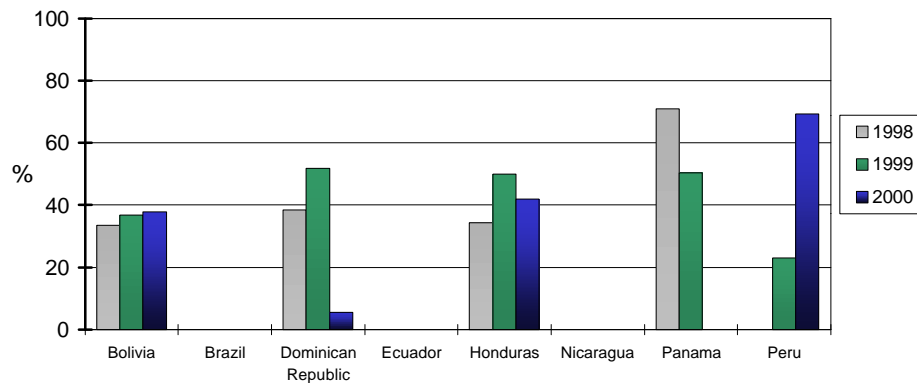


Figure 5: Trends in the coverage of vitamin A supplementation of postpartum women (1998-2000)

Nicaragua with its regular national health campaigns every six months and strong integrated health services approach demonstrated consistent coverage rates above 60%. It is evident that the administration of the follow-up doses for the target children is a weak or nonexistent strategy in most of the countries.

The difference in the coverage rates between the first and second dose per year for children above one year of age is made even more apparent when the three-year mean percentages during the years 1998-2000 are superimposed on each other (Figure 4). The difficulty of reaching the children following their first year of life is further compounded by the difficulty of making a second contact within the same year.

Vitamin A supplementation of women immediately in their postpartum period is a relatively new strategy for most of the countries. Although eight countries reported as having postpartum women as a target group for their vitamin A supplementation programs, only five reported actual coverage data (Figure 5). (Guatemala and Mexico have not included postpartum women as a target group for vitamin A supplementation.) In the countries where no coverage has been reported, it is likely that this target group has only recently been incorporated into the program or simply, no significant coverage has been obtained. In general, however, low coverage of this target group may be attributed to the challenges in integrating efforts with other health programs, such as immunization and child health programs, reproductive health services and even non-traditional health contacts, in order to reach mothers directly or during a health contact for their infants.

All of the countries that are providing maternal supplementation reported as administering vitamin A supplements through maternity wards and clinics, with a few countries also reporting on supplementation during routine immunization contacts. On the other hand, only half of the reporting countries showed national rates of institutional births of 80% or higher, while the others reported around 40% (see Country Profiles). This shows that while maternal supplementation in maternity wards and clinics immediately after delivery is an essential channel for distribution, it is insufficient to assure maximum coverage of targeted women, particularly those who are most at-risk and are also more likely to be among the group who are outside of the formal health system. Furthermore, an inter-programmatic approach involving maternity wards, immunization contacts and other health services is necessary in order to increase the coverage of postpartum women for vitamin A supplementation.

Distribution Channels

Behind the numbers of the targeted children and women reached for vitamin A supplementation, there exist specific channels through which local health workers are actively delivering supplements to each child and mother. The main categories of distribution channels include (1) national immunization or health campaigns, (2) routine immunization contacts and (3) others, which may involve community health agents and other maternal and child health contacts. The link between vitamin A supplementation and immunization has been the most frequently utilized channel for distribution, particularly in reaching children below five years of age. In the past, national vaccination or health campaigns were most often used to provide vitamin A supplementation to children. For 1998, the percentages of the three distribution channels used to provide at least the first dose of vitamin A supplements to all children, from the countries where such information is available, are shown in Figure 6.

In more recent years, countries have begun to use a combination of campaigns and routine immunization contacts to reach more of the target children for vitamin A supplementation (Figure 7-8). Still, the large number of missed opportunities shown earlier by the coverage rates, particularly for children above one year of age and even greater for their second dose per year, is a manifestation of the gap that needs to be bridged further through closer coordination with immunization activities and other health contacts in order to assure the completion of the dosing schedule for the target children.

For the supplementation of postpartum women, channels for distribution include both immunization activities and contacts in maternity wards or clinics following delivery. The five countries that provided actual coverage data for maternal supplementation specified the use of either immunization contacts or contact following an institutional delivery for reaching the target women during the years 1998-2000 (Figure 9). In the qualitative information provided by each of the ten countries, however, all of the countries reported that a combination of various contacts was being used to reach mothers immediately after delivery. Nonetheless, there still remains a tremendous need for improvement in strengthening coverage through integration of vitamin A supplementation with maternity wards, clinics, midwives, immunization contacts and other reproductive health contacts. Also it is extremely important to complement this activity with breastfeeding education throughout the entire process in order to assure adequate vitamin A status of the infants as well as the mother.

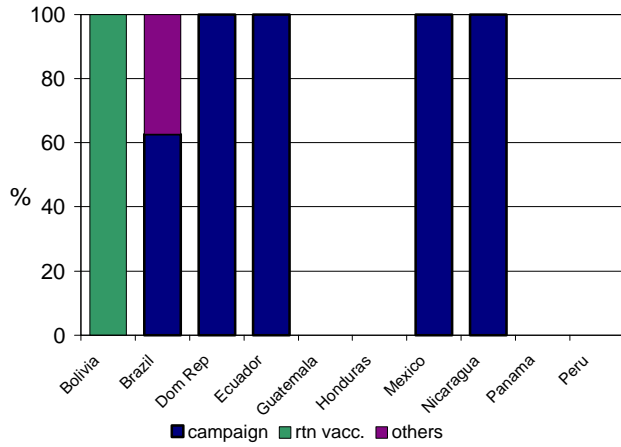


Figure 6: Percentage of vitamin A supplementation through various distribution channels: Children (first dose), 1998

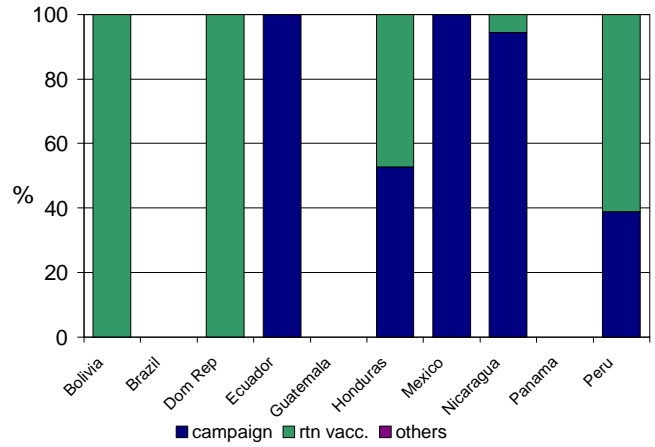


Figure 7: Percentage of vitamin A supplementation through various distribution channels: Children (first dose), 1999

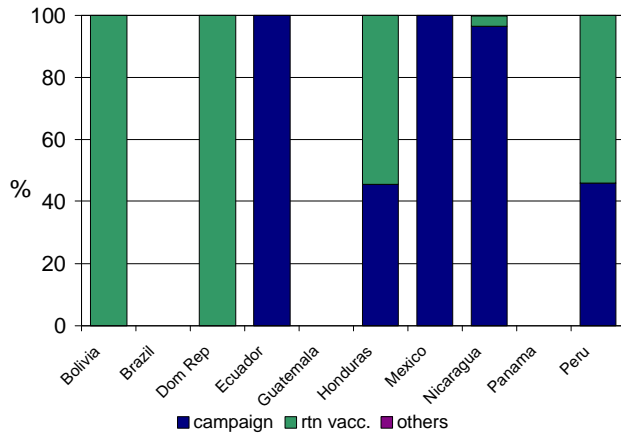


Figure 8: Percentage of vitamin A supplementation through various distribution channels: Children (first dose), 2000

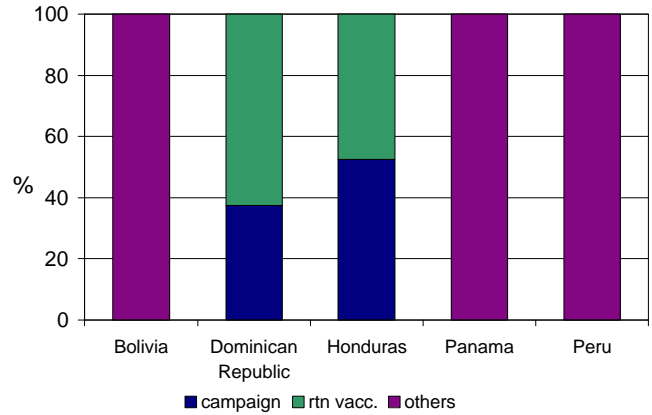


Figure 9: Percentage of vitamin A supplementation through various distribution channels: Mothers, 1998-2000

COUNTRY PROFILES

Based on the results of the comprehensive questionnaire on vitamin A supplementation that was completed by each of the participating countries, brief country profiles were developed and are presented below. These profiles aid to provide a quick overview of the individual countries and their vitamin A supplementation programs. The complete responses to the questionnaire which are not disclosed in this meeting report will be analyzed and used to provide further technical support to the individual countries, catering to their specific situations and needs.

BOLIVIA					
Total population	Population under five years of age	Population under one year of age			
National infant mortality prevalence ² (<1 year old)					
Percentage of population living in urban areas					
Percentage of women receiving at least one prenatal visit					
Percentage of births in hospitals or clinics					
Target population for vitamin A supplementation			Children 6 months - 5 years, Postpartum women		
Target area for vitamin A supplementation			Entire country		
Criteria used to determine target groups			Serum retinol study		
Date and results of last survey of serum retinol			1991: 48% of the population <5 years of age was below 30mcg/dl and 11% was below 20mcg/dl		
Most prevailing problems impeding maximum coverage and sustainability of vitamin A supplementation			- Availability of vitamin A capsules in the country is dependent on donation		
Most prevailing factors contributing to the maximum coverage and sustainability of vitamin A supplementation			- Link with Immunization - Vitamin A supplementation is part of the Basic health security		
Existence of a policy statement linking vitamin A supplementation to the vaccination schedule			YES		
Distribution channels used for supplementation of target children			National immunization campaigns, routine immunization contacts, IMCI		
Distribution channels used for supplementation of postpartum women			Maternity wards and clinics		
Regular training for vitamin A supplementation			NO, training is conducted only for special activities		
Information system for vitamin A supplementation			SNIS (National System of Statistical Information)		
Regular monitoring and feedback			NO		
Supervision conducted during the year 2000			YES, through nutrition sentinel sites and IMCI monitoring		

² The national infant mortality prevalence does not reflect the differences in geographical areas within the country, where specific pockets of population may have extremely high prevalence of infant mortality and are not represented by the national rates.

BRAZIL					
Total population	<5 years	<1 year	163,947,554	16,567,503 (10.1%)	3,296,663 (2.0%)
National infant mortality prevalence			33.6/1,000		
% of population living in urban areas			80%		
% of women with at least one prenatal visit			3.6 consultations/female		
% of institutional births			98.7% (1999)		
Target population for vitA supplementation			Children 6 – 59 months		
Target area for vitamin A supplementation			States of the Northeast Region and Vale do Jequitinhonha (north of the state of Minas Gerais)		
Criteria used to determine target groups			Socioeconomic and climatic (dry) conditions		
Date and results of last serum retinol survey			1997: 19.3% incidence of serum retinol levels below 20mcg/dl in the state of Pernambuco		
Problems in vitamin A supplementation			<ul style="list-style-type: none"> - Little communication between the states and the federal level - Short intervals between campaign dates (only 2 months) - Overloading of tasks for personnel involved in immunization 		
Strengths in vitamin A supplementation			- Supplementation during immunization campaigns (since 1994)		
Policy statement linking vitA to vaccination			NO		
Distribution channels for children			National immunization campaigns, routine immunization contacts, community health agents, IMCI		
Distribution channels for postpartum women			Maternity wards and clinics		
Regular training for vitA supplementation			YES		
Information system for vitA supplementation			Quarterly collection of registration forms from the states		
Regular monitoring and feedback			YES		
Supervision in the year 2000			YES, supervisory visits conducted when no data from states		

DOMINICAN REPUBLIC					
Total population	<5 years	<1 year	8,942,189	1,206,496 (13.5%)	236,826 (2.6%)
National infant mortality prevalence			33.6/1,000 live births (2000)		
% of population living in urban areas			62% (1999)		
% of women with at least one prenatal visit			93.3% (1999)		
% of institutional births			87.6% (1999)		
Target population for vitA supplementation			Children 6 months – 5 years, Mothers up to 6 weeks postpartum		
Target area for vitamin A supplementation			Entire country		
Criteria used to determine target groups			Prevalence of VAD in preschoolers – 1993 CENISMI survey		
Date and results of last serum retinol survey			1993: 22.3% of preschoolers with low serum retinol levels and 5.8% with VAD		
Problems in vitamin A supplementation			<ul style="list-style-type: none"> - Provincial departments do not consider VAD as a priority within the primary attention programs - Lack of inter-sectorial coordination between maternal and child programs and the health departments 		
Strengths in vitamin A supplementation			<ul style="list-style-type: none"> - Link with the immunization program – supplementation through vaccination posts and national campaigns - Technical support of PAHO and UNICEF 		
Policy statement linking vitA to vaccination			YES		
Distribution channels for children			National immunization campaigns, routine immunization contacts, community health agents, IMCI		
Distribution channels for postpartum women			Maternity wards and clinics, national immunization campaigns, routine immunization contacts, community health agents, IMCI		
Regular training for vitA supplementation			YES		
Information system for vitA supplementation			SESPAS (in 2001, Nutrition Dept is collecting data thru SESPAS)		
Regular monitoring and feedback			YES		
Supervision in the year 2000			YES		

ECUADOR					
Total population	<5 years	<1 year	12,879,499	1,467,585 (11.4%)	279,409 (2.2%)
National infant mortality prevalence	24.6/1,000 live births				
% of population living in urban areas					
% of women with at least one prenatal visit	73.6%				
% of institutional births					
Target population for vitA supplementation	Children 6 – 59 months, Postpartum women				
Target area for vitamin A supplementation	Parishes considered as being critical				
Criteria used to determine target groups	Provincial population				
Date and results of last serum retinol survey	1993: 30% of children of mothers with little or no formal education in rural sectors were <20mcg/dl, 21% of children 12-35 months, and 15% in children 36-59 months				
Problems in vitamin A supplementation	- Cannot rely on sufficient supplies and timely vaccines in order to plan regular national campaigns				
Strengths in vitamin A supplementation	<ul style="list-style-type: none"> - Coordination with Immunization - Mass promotional and informational campaigns - Training of health personnel - Inter-personal communication with health service users 				
Policy statement linking vitA to vaccination	NO				
Distribution channels for children	National immunization campaigns, routine immunization contacts, community health agents, nurseries				
Distribution channels for postpartum women					
Regular training for vitA supplementation	YES				
Information system for vitA supplementation	Provinces send their reports to the central level by regular monthly form following the national campaigns				
Regular monitoring and feedback	YES				
Supervision in the year 2000	YES				

GUATEMALA					
Total population	<5 years	<1 year	11,111,461	2,111,178 (19.0%)	333,344 (3.0%)
National infant mortality prevalence	40.49/1,000				
% of population living in urban areas	34.98%				
% of women with at least one prenatal visit	59.6%				
% of institutional births	40.4% national – 66.5% urban, 24.9% rural				
Target population for vitA supplementation	Children 6 – 35 months				
Target area for vitamin A supplementation	Entire country				
Criteria used to determine target groups	Highest VAD prevalence (<5 years-of-age group mean)				
Date and results of last serum retinol survey	1995: (<20mcg/dl) 15.8% of children 1-5 years, 19.9% of children 12-23 months, 17.7% children of 24-35 months, 13.1% of children 36-47 months, 11.9% of children 48-59 months				
Problems in vitamin A supplementation	- Lack of information and education to operational and non-operational personnel on the importance of the program				
Strengths in vitamin A supplementation	<ul style="list-style-type: none"> - Sufficient supplies at the time of supplementation - Integration with health campaigns and routine health activities 				
Policy statement linking vitA to vaccination	YES				
Distribution channels for children	National immunization campaigns, routine immunization contacts, community health agents, IMCI				
Distribution channels for postpartum women					
Regular training for vitA supplementation	YES				
Information system for vitA supplementation	SIGSA (General Health Information System)				
Regular monitoring and feedback	YES				
Supervision in the year 2000	YES, inter-programmatic supervisory visits to the regions				

HONDURAS					
Total population	<5 years	<1 year	6,341,717	885,975 (14.0%)	190,954 (3.0%)
National infant mortality prevalence			42/1,000 live births (1996)		
% of population living in urban areas			50.2%		
% of women with at least one prenatal visit			84% (2000)		
% of institutional births			45% (2000)		
Target population for vitA supplementation			Children 6 months – 5 years, Mothers up to 30 days postpartum		
Target area for vitamin A supplementation			Entire country		
Criteria used to determine target groups			VAD in the population <5 years of age		
Date and results of last serum retinol survey			1996: 14.5% of children 12-59 months with serum retinol levels <20mcg/dl, 13.8% of children 12-71 months with <20mcg/dl		
Problems in vitamin A supplementation			- Problems in programming and operational supplies at the service networks from the local, area to regional levels		
Strengths in vitamin A supplementation			- National immunization campaigns, special vaccination operations, routine vaccination program		
Policy statement linking vitA to vaccination			NO, only for national immunization campaigns		
Distribution channels for children			National immunization campaigns, routine immunization contacts, community health agents, IMCI, hospitals (pediatrics)		
Distribution channels for postpartum women			Maternity wards and clinics, national immunization campaigns, routine immunization contacts, community health agents, IMCI		
Regular training for vitA supplementation			YES		
Information system for vitA supplementation			Monthly registration with vaccination to the Dept of Statistics at all levels		
Regular monitoring and feedback			YES, Child Health Unit provides feedback to regional and area teams and cooperative agencies		
Supervision in the year 2000			YES, supervision to the 9 health regions is integrated with Dept of Maternal and Child Health		

MEXICO					
Total population	<5 years	<1 year	99,198,613	10,778,048 (10.9%)	2,124,297 (2.1%)
National infant mortality prevalence			13.91/1,000 registered live births		
% of population living in urban areas			73.5% (1995)		
% of women with at least one prenatal visit			77% (1999)		
% of institutional births			87% (2000)		
Target population for vitA supplementation			Children 6 months – 4 years		
Target area for vitamin A supplementation			Municipalities at high risk of infant mortality from diarrhea		
Criteria used to determine target groups			National Vaccination Council determines program for children <5 years of age		
Date and results of last serum retinol survey					
Problems in vitamin A supplementation			- It is not a complete program; supplementation started in 1993 in application of the WHO recommendation		
Strengths in vitamin A supplementation			- Supplementation takes place during National Health Weeks in areas at high risk of diarrheal disease		
Policy statement linking vitA to vaccination			YES		
Distribution channels for children			National Health Week campaigns		
Distribution channels for postpartum women					
Regular training for vitA supplementation			NO		
Information system for vitA supplementation			YES, only during national health campaigns through SENAS		
Regular monitoring and feedback			YES		
Supervision in the year 2000			YES, as part of the national health week campaigns		

NICARAGUA					
Total population	<5 years	<1 year	5,071,671	801,056 (15.8%)	160,831 (3.2%)
National infant mortality prevalence	40/1,000 live births				
% of population living in urban areas	57.1%				
% of women with at least one prenatal visit	75%				
% of institutional births	78.5%				
Target population for vitA supplementation	Children 6 months – 5 years, Postpartum women				
Target area for vitamin A supplementation	Entire country				
Criteria used to determine target groups	VAD prevalence data from 1993 National Micronutrients Survey				
Date and results of last serum retinol survey	January-March 2000: 9% national mean in children <5 years of age (<20mcg/dl)				
Problems in vitamin A supplementation	- Limitations in economic and logistical resources for mobilization of personnel into the communities				
Strengths in vitamin A supplementation	- Mass activity campaign through the national health campaigns with vaccination and intestinal deparasitation				
Policy statement linking vitA to vaccination	YES				
Distribution channels for children	National health campaigns, routine immunization contacts, IMCI				
Distribution channels for postpartum women	Maternity wards and clinics, national health campaigns, Primary Attention Units with childbirth attention				
Regular training for vitA supplementation	YES				
Information system for vitA supplementation	Through the system of monthly EPI integrated information and for national health campaigns				
Regular monitoring and feedback	YES				
Supervision in the year 2000	YES				

PANAMA					
Total population	<5 years	<1 year	2,855,703	301,382 (10.6%)	59,949 (2.1%)
National infant mortality prevalence	16.6/1,000 live births				
% of population living in urban areas	61.8%				
% of women with at least one prenatal visit	72.8%				
% of institutional births	89.4%				
Target population for vitA supplementation	Children 6 – 59 months, Postpartum women				
Target area for vitamin A supplementation	Priority districts (Bocas del Toro – Chiriquí Veraguas)				
Criteria used to determine target groups	Results of the 1992 National Vitamin A Survey				
Date and results of last serum retinol survey	1999: 0.8% <10mcg/dl, 1.0% <20mcg/dl (very little VAD in the country)				
Problems in vitamin A supplementation					
Strengths in vitamin A supplementation					
Policy statement linking vitA to vaccination	YES				
Distribution channels for children	Routine immunization contacts, community health agents				
Distribution channels for postpartum women	Maternity wards and clinics, postpartum attention				
Regular training for vitA supplementation	YES				
Information system for vitA supplementation	Quarterly collection through Health Analysis and Trends				
Regular monitoring and feedback	NO				
Supervision in the year 2000	NO				

PERU					
Total population	<5 years	<1 year	25,661,690	2,896,261 (11.3%)	587,552 (2.3%)
National infant mortality prevalence			43/1,000 live births		
% of population living in urban areas			71.6%		
% of women with at least one prenatal visit			77.2%		
% of institutional births			48.7%		
Target population for vitA supplementation			Children 6 – 59 months, Postpartum women		
Target area for vitamin A supplementation			123 provinces (63% of total provinces)		
Criteria used to determine target groups			TMI, immunization coverage, population with NBI, chronic malnutrition		
Date and results of last serum retinol survey			1999: 11.1% of children <5 years of age and 1.5% women of fertile age (<20mcg/dl), National Monitoring of Nutritional Indicators		
Problems in vitamin A supplementation			- Lack of incorporation in the budget and resources for the prioritized strategic activities		
Strengths in vitamin A supplementation			- Human resources are trained and committed to the activities		
Policy statement linking vitA to vaccination			YES		
Distribution channels for children			National immunization campaigns, routine immunization contacts, community health agents, IMCI		
Distribution channels for postpartum women			Routine immunization contacts		
Regular training for vitA supplementation			YES		
Information system for vitA supplementation			Monthly information collection format established by EPI and Maternal Perinatal		
Regular monitoring and feedback			YES		
Supervision in the year 2000			YES		

CONCLUSIONS AND RECOMMENDATIONS

In result of the working group sessions, specific conclusions were made regarding the advances, weaknesses and recommended activities in the three programmatic areas – (1) improving second-dose coverage for children, (2) supplementation of postpartum women, and (3) monitoring and supervision. Countries identified key points and activities that they considered as essential elements for strengthening the vitamin A supplementation programs in these three areas. The conclusions and recommendations are not exhaustive of all the aspects related to the program but are simply results of the meeting discussions.

1. Improving Second-dose Coverage for Children

Despite the advances in reaching high rates of targeted children at least once a year for vitamin A supplementation – above 60% of children 6-11 months of age and above 40% of children one year and older for their first dose of vitamin A, the coverage for the second and follow-up doses of vitamin A are extremely low, or even nonexistent in some countries. Greater attention and effort in providing the follow-up doses of vitamin A and completing the dosing schedule in order to assure adequate vitamin A status of children year-round are necessary. Greater inter-programmatic coordination with other health services and programs, in addition to immunization, is required to reach each child at least twice a year.

- ***Strengths and advances***

1. Incorporation of vitamin A supplementation in immunization activities – routine contacts, national campaigns, follow-up campaigns and other activities
2. Implementation of the Integrated Management of Childhood Illness strategy, which provides another opportunity for integration of vitamin A supplementation
3. Availability of vitamin A supplements through national and international agreements, non-governmental organizations, and basic health security or package
4. Participation of human resources from the Expanded Program of Immunization (EPI)
5. Existence of a system of registration
6. Existence of national commissions on food and nutrition that prioritize and work in nutritional activities

- ***Problems and weaknesses***

1. Weak systems of information, monitoring, supervision and evaluation of vitamin A supplementation
2. Lack of incorporation of vitamin A supply costs within the national country budgets
3. Difficulties in acquisition, storage, administration and expiration of vitamin A capsules
4. Existence of missed opportunities
5. Lack of promotion and education regarding the importance and necessity of follow-up doses of vitamin A supplements
6. Lack of continuous commitment, training and empowerment of health personnel
7. Insufficient resources for training, supervision and monitoring
8. Outdated national programs on food and nutrition, i.e. with regard to vitamin A supplementation

- **Recommendations (7)**

ACTIVITIES	RESPONSIBLE PROGRAMS OR AREAS
1. Obtain political commitment and will and the participation of other sectors, including civil society and private industries, in support of activities to combat VAD	Nutrition, Immunization, Integrated Management of Childhood Illness (IMCI)
2. Assure the timely availability of vitamin A supplies by establishing a routine system for purchasing of capsules through the national budgets and/or through improved coordination with agencies of technical cooperation/donation	Nutrition, Immunization, IMCI
3. Take advantage of national or regional health campaigns and routine health service contacts to provide vitamin A supplementation	Nutrition, Immunization, IMCI
4. Utilize the Integrated Management of Childhood Illness and Reproductive Health contacts to provide vitamin A supplementation	According to country
5. Update routine immunization activities to include vitamin A supplementation	Nutrition, Immunization
6. Develop and strengthen an integrated plan or system of information, education and communication (IEC) on vitamin A supplementation for the public as well as for health workers	Ministries of Health, Social Communication department
7. Maintain the exchange of experiences among the national, regional, and local coordinators through periodic meetings	Nutrition, Immunization, IMCI

2. Supplementation of Postpartum Women

While vitamin A supplementation of women immediately in their postpartum period is a strategy that has been introduced only in the past few years in most of the countries, lessons learned on how to strengthen the activity and improve coverage have already been gathered. Reaching this target group requires greater education and communication regarding maternal supplementation and an integrated strategy that incorporates various health contacts within and outside of the formal health system. Supplementation of postpartum women should be recognized for its double advantage in securing adequate vitamin A status for the mother and in building up the vitamin A reserves of the infant through breastfeeding.

One particular link that could be formalized between the vaccination schedule and vitamin A supplementation of postpartum women in order to assure their maximum coverage is the timing of the BCG vaccination. The BCG vaccine is administered to all infants at birth and has extremely high coverage in the Region, about 90% or higher. A strong recommendation was made specifically regarding a formal link to take advantage of the BCG vaccination contact of the newborn to administer a vitamin A supplement to the mother immediately after delivery (and within six weeks postpartum, when there is no possibility of the mother's subsequent pregnancy).

- **Strengths and advances**

1. Existence of documentation on the lack of advances in relation to vitamin A supplementation of postpartum women
2. Existence of national norms that include the administration of vitamin A supplements to postpartum women in most countries
3. High coverage rates of BCG vaccination which provides the potential for the maximum coverage of maternal supplementation, when integrated with this contact
4. Verification of completed vaccination card for a newborn as a prerequisite for receiving a birth certificate provides another opportunity to administer vitamin A supplements to mothers at the time of the child's immunization

- **Problems and weaknesses**

1. Low coverage of institutional births in many countries, which necessitates the use of other health contacts and distribution channels outside of the formal health system
2. Scarce or lack of application of existing norms
3. Existence of missed opportunities for vitamin A supplementation of postpartum mothers when BCG is being administered to the newborn
4. Verticalization of the programs on Women's Health which often causes vitamin A supplementation to be left out
5. Lack of promotion and education on postpartum supplementation for mothers, midwives and health promoters

- **Recommendations (5)**

ACTIVITIES	RESPONSIBLE PROGRAMS OR AREAS
1. Assure the implementation of existing norms on vitamin A supplementation through supervision or develop norms for supplementation of postpartum women	Nutrition, Immunization, Maternal and Child Health, Reproductive Health According to each country
2. Take advantage of the link with the BCG contact to provide vitamin A supplementation to postpartum women	Nutrition, Immunization, Maternal and Child Health, Reproductive Health
3. Take advantage of any contact that a woman makes immediately after delivery with the health services to provide vitamin A supplementation up to six weeks postpartum	All health personnel
4. Strengthen training of community personnel (i.e. midwives) in vitamin A supplementation	Nutrition, Reproductive Health
5. Promote supplementation of postpartum mothers, adapting the promotional activities to the local context and in the language to be understood by the local community	Ministries of Health, Social Communication department

3. Monitoring and Supervision

Monitoring and supervision are necessary to ensure that all targeted children and postpartum women are appropriately supplemented, to avoid any possibility of overdosing and to evaluate the effectiveness of the program in achieving its coverage goals. Monitoring also allows for determining missed opportunities, feedback and corrective measures, when necessary. A system of data reporting, monitoring, feedback and supervision that functions from the local to the central levels is essential to evaluate the progress of the program. Despite the understanding that monitoring and supervision are fundamental components in any program, they have been most often neglected.

- **Strengths and advances**

1. Documented advances in vitamin A supplementation coverage
2. Incorporation of data monitoring within the EPI information system
3. Development or adaptation of instruments for data collection
4. Adequate planning and programming in acquisition of supplies, storage, and administration of supplements in some countries
5. Improved inter-programmatic planning and management

- **Problems and weaknesses**

1. Inadequate planning of programmatic activities, process indicators and coverage goals
2. Information system does not permit the differentiation of first and second doses for the year in some countries
3. Lack of system for process monitoring for vitamin A supplementation (i.e. planning, supplies acquisition, storage and administration) in some countries
4. Lack of execution of existing norms on monitoring and supervision
5. Lack of norms on integrated monitoring and supervision among programs at the local level
6. Lack of incorporation of vitamin A data in the routine EPI information system and analysis of the data by the Nutrition Program in some countries
7. Dependence and sole reliance on international donations for vitamin A supplies poses a risk on the sustainability of the program
8. Preparations of the supplements in 500 capsules per bottle/flask make it difficult for distribution in smaller or specific quantities to the local and provincial levels
9. Lack of timely information for making decisions or taking action at the municipal level
10. Lack of systematic supervision and resources for implementation of supervisory activities

- **Recommendations (11)**

ACTIVITIES	RESPONSIBLE PROGRAMS OR AREAS
1. Establish an integrated information system that permits the registration of locations, target groups and differentiation of 1 st and 2 nd doses per year, and require mandatory reporting	Nutrition, Immunization, Integrated Management of Childhood Illness (IMCI), Maternal and Child Health According to each country
2. Adapt health cards to include vitamin A supplementation	Nutrition
3. Analyze the coverage data and missed opportunities on a regular basis and provide regular feedback	Nutrition, Immunization, IMCI, Maternal and Child Health
4. Revise existing norms and elaborate an operational manual that addresses the various programmatic elements – supplies, storage and handling, administration and monitoring (process indicators) - to assure supplementation of children and mothers	Nutrition, Immunization, IMCI, Maternal and Child Health According to each country
5. Promote the use and frequent review of operational manuals	Nutrition, Immunization, IMCI, Maternal and Child Health
6. Request sufficient quantities of vitamin A supplies according to the updated estimations of the target population in advance for the following two years	Nutrition, Immunization According to each country
7. Consider including vitamin A supplements in the revolving funds for drugs and vaccines and include cost in the national country budget and at the municipalities	Ministries of Health, PAHO
8. Incorporate vitamin A supplementation into the national campaign expenses	Ministries of Health, Ministries of Finance
9. Involve the administrative personnel and general services in the activities planning in order to ensure that sufficient quantities of capsules and other supplies are available in a timely manner and other logistical elements are in place	Nutrition, Immunization, IMCI, Maternal and Child Health
10. Provide feedback to health personnel and others involved through informational bulletins	Nutrition, Immunization, IMCI, Maternal and Child Health According to each country
11. Conduct periodic Regional meetings to exchange experiences and progress	Nutrition, Immunization, IMCI

NEXT STEPS

This inter-programmatic Regional meeting was a tremendous milestone, not only for reinforcing vitamin A supplementation programs through a multi-programmatic strategy, but also in reinforcing the importance of strategic alliances to ensure efficiency in efforts to advance the health and nutrition in the Americas. With respect to vitamin A supplementation in the Region, the meeting confirmed the essentiality of an inter-programmatic approach and resulted in the mapping of specific lines of activity and responsibility for dramatically advancing our efforts.

The possibility of achieving complete coverage of the target groups for vitamin A supplementation through integration in various existing health services was clearly envisioned. High coverage rates of DPT, OPV, measles and BCG vaccinations for children under one year of age in our Region (about 90%) presented the potential to reach the maximum number of targeted children and women immediately in their postpartum period for vitamin A supplementation through these contacts. The steadily growing program on Integrated Management of Childhood Illness (IMCI) at the community levels provided prime opportunities to reinforce routine supplementation. Coordination with these two programs, combined with maternity wards, midwives and community aids, presented concrete channels for reaching every targeted child and postpartum woman to provide them with vitamin A supplements and to complete their dosing schedules.

In addition to the key inter-programmatic focus of the meeting, holding this meeting in Nicaragua also held twofold advantages. The delegates from Nicaragua were given an opportunity to share with the other countries the notable advances and success in their effort to combat vitamin A deficiency which were achieved through a well-concerted inter-programmatic and inter-agency supplementation strategy, coupled with the implementation of sugar fortification with vitamin A. They also clearly demonstrated the key to their successful program – political commitment and support. In Nicaragua, the prevalence of vitamin A deficiency in the year 2000 was reduced from 31% to 9% within five years, and the role of the Minister of Health was essential in leading the effort by prioritizing the activities in her political agenda. This was further demonstrated by her opening presentation and presence in the meeting. The example of Nicaragua set the precedence for making tremendous impact in the reduction of vitamin A deficiency through strong political commitment and inter-programmatic coordination in program implementation.

- **Follow-up to the recommendations at the country level**

Based on the meeting results, countries are encouraged to follow-up on the recommended activities and reinforce their ongoing vitamin A supplementation programs, with technical support continually provided by PAHO.

- **Reinforce the Regional effort to advance the elimination of VAD**

With the impetus of the immense experiences and lessons already learned, PAHO plans to work with the countries in advancing the effort to eliminate VAD in the Region through the dissemination of the findings and proposed lines of inter-programmatic activities.

ANNEXES

Annex 1: List of Participants

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Annex 2: Vitamin A Supplementation Questionnaire

INTEGRATED LOOK AT VITAMIN A SUPPLEMENTATION IN THE AMERICAS

**Regional Meeting
1-3 May 2001
Managua, Nicaragua**

***Food and Nutrition Program/Division of Health Promotion and Protection
Division of Vaccines and Immunization/Expanded Program on Immunization
Integrated Management of Childhood Illnesses/Division of Disease Prevention and Control
Pan American Health Organization (PAHO)***



Questionnaire on Vitamin A supplementation

Instructions:

1. PLEASE RESPOND TO EACH QUESTION AS COMPLETELY AS POSSIBLE.
2. ATTACH ANY RELEVANT DOCUMENTS AND INFORMATION TO THE QUESTIONAIRES.
3. SEND THE ENTIRE PACKAGE TO: **PAN AMERICAN HEALTH ORGANIZATION
FOOD AND NUTRITION PROGRAM (HPP/HPN)
ATTN: SUNNY S. KIM
525 23RD STREET, NW
WASHINGTON, DC 20037
USA**

OR BY EMAIL (kimsunny@paho.org), BEFORE **APRIL 13, 2001**.
4. * AFTER COMPLETING THE QUESTIONNAIRE AND IN LIGHT OF THE RESULTS, PLEASE PREPARE A BRIEF **10-MINUTE PRESENTATION** PROPOSING A SET OF ACTIVITIES FOR IMPROVING THE VITAMIN A SUPPLEMENTATION PROGRAM (I.E. INCREASING COVERAGE) IN YOUR COUNTRY. THIS PRESENTATION SHOULD BE PREPARED IN COORDINATION WITH ALL OF THE DIFFERENT PROGRAMS INVOLVED IN VITAMIN A SUPPLEMENTATION – NUTRITION, IMMUNIZATION, MATERNAL AND CHILD HEALTH, ETC. PRESENTATIONS WILL BE MADE DURING THE REGIONAL MEETING.

INFORMATION OF THE PERSON COMPLETING THE QUESTIONNAIRE

Name: _____
Title: _____
Institution/Program: _____
Address: _____

Telephone/Fax: _____
Electronic mail: _____
Today's date (dd/mm/yy): ____/____/____

GENERAL COUNTRY INFORMATION

Name of country: _____
Population (millions): _____
Population under 5 years of age: _____
Population under 1 year of age: _____
National infant mortality prevalence (<1 year old): _____
Percentage of population living in urban areas: _____
Percentage of women receiving at least one prenatal visit: _____
Percentage of births in hospitals or clinics: _____

GENERAL DESCRIPTION OF VITAMIN A SUPPLEMENTATION PROGRAM

- i. Year when vitamin A supplementation first started:
- ii. Target population for vitamin A supplementation: _____

- iii. Recommended dosing schedules for target groups: _____

- iv. Target areas (if not national coverage): _____
- v. Criteria used to determine target groups: _____
- vi. Source of information used to determine target group: _____
- vii. Last survey of serum retinol, if any: _____
- viii. Results of last survey or information available on vitamin A deficiency prevalence (%):

- ix. Most prevailing problems *impeding* the maximum coverage and sustainability of the program: _____

- x. Most prevailing factors *contributing* to the maximum coverage and sustainability of the program: _____

OTHER INTERVENTION STRATEGIES

- i. Other activities or interventions to reduce/prevent vitamin A deficiency (i.e. food fortification with vitamin A) and date started: _____

INTER-PROGRAMMATIC COORDINATION

1. Which Program within the Ministry of Health is responsible for vitamin A supplementation?

2. Who is the person in charge?

NAME: _____

EMAIL: _____

PHONE/FAX: _____

3. Is there a policy statement linking vitamin A supplementation to the immunization schedule? Yes____ No____

4. Is there a policy statement linking vitamin A supplementation to other health contacts? (please specify: _____)

Yes____ No____

5. Is there a policy statement on vitamin A supplementation of postpartum women? Yes____ No____

6. Indicate the programs, institutions, organizations, and others that participate in the following:

Program planning _____

Materials development and dissemination _____

Training _____

Storage and local distribution of supplements _____

Administration of vitamin A supplements _____

Data collection _____

Monitoring and feedback _____

Supervision _____

Other: please specify _____

7. Could inter-programmatic coordination in vitamin A supplementation be improved? Yes____ No____

8. If the previous response is "Yes," how would you improve coordination? _____

MANAGEMENT AND OPERATIONS

- TYPE OF VITAMIN A SUPPLEMENT**

9. What form of vitamin A preparation is used for vitamin A supplementation? (check all that apply)

VITAMIN A CAPSULES: 100,000 IU _____ 200,000 IU _____ other dosage: please specify _____

MULTI-DOSE DISPENSERS OF OILY VITAMIN A SOLUTION

OTHER: please specify _____

10. Provide comments on ease of administration of the vitamin A supplements: _____

- LOGISTICS**

11. Who supplies the vitamin A supplements? _____

12. Was there sufficient supply of vitamin A supplements in the country this *past* year? Yes____ No____

13. Is there sufficient supply of vitamin A supplements in the country for the *current* year? Yes____ No____

14. Is there sufficient supply of vitamin A supplements in the country for *next* year? Yes____ No____

15. How will the next supply of vitamin A supplements be acquired? _____

16. How are vitamin A supplements transported, distributed to the local health facilities and stored? _____

17. Identify any logistical problems or lessons learned related to capsules transport, distribution, storage, stock check and handling, if any:

18. How could these be improved? _____

• **DISTRIBUTION CHANNELS**

19. Where does vitamin A supplementation of targeted *children* take place?
- | | | |
|---|----------|---------|
| a) National immunization or health campaigns | Yes_____ | No_____ |
| b) Routine immunization contacts | Yes_____ | No_____ |
| c) Community health agent contacts | Yes_____ | No_____ |
| d) Integrated Management of Childhood Illnesses (IMCI) contacts | Yes_____ | No_____ |
| e) Other routine health services: please specify_____ | Yes_____ | No_____ |
20. Where does vitamin A supplementation of targeted *postpartum women* take place, if at all?
- | | | |
|---|----------|---------|
| a) Maternity wards in hospitals or clinics (immediately after delivery) | Yes_____ | No_____ |
| b) National immunization or health campaigns | Yes_____ | No_____ |
| c) Routine immunization contacts | Yes_____ | No_____ |
| d) Community health agent contacts | Yes_____ | No_____ |
| e) Integrated Management of Childhood Illnesses (IMCI) contacts | Yes_____ | No_____ |
| f) Other routine health services: please specify_____ | Yes_____ | No_____ |

• **MATERIALS AND TRAINING**

21. Are educational or communication materials for vitamin A supplementation available and in use?
- | | | |
|--|----------|---------|
| a) For personnel involved in vitamin A supplementation | Yes_____ | No_____ |
| b) For the public | Yes_____ | No_____ |
22. Information on vitamin A supplementation is contained in what format: (check all that apply)
- Integrated into pre-existing EPI manuals
- Integrated into IMCI manuals or other health service materials
- Separate vitamin A supplementation materials are available
23. What educational or communication materials have been most beneficial to the program? _____
- _____
24. Is training for vitamin A supplementation conducted on a regular basis? Yes_____ No_____
25. Is vitamin A supplementation training conducted as part of immunization activities, e.g. national campaign? Yes_____ No_____

26. Is vitamin A supplementation training integrated as part of other health services? (please specify) Yes____ No____

27. If training for vitamin A supplementation takes place, please complete the following table as much as possible:

DATES OF TRAINING (1998-2001)	NUMBER OF PERSONS TRAINED	LEVEL OF THE PARTICIPANTS ¹ (please select A-I)

¹ Level of the participants: A. Provincial/sate manager E. Nurse
 B. District manager F. Nutritionist
 C. Health center/post manager G. Community health agent or local health worker
 D. Physician H. Community leader
 I. Other: please specify _____

28. What topics are usually included in the training for vitamin A supplementation?

- a) Basic nutrition education Yes____ No____
- b) Safety of vitamin A supplementation Yes____ No____
- c) Dosing schedules for target groups Yes____ No____
- d) Instructions for screening target groups Yes____ No____
- e) Technique for administering vitamin A supplements Yes____ No____
- f) Methods for handling and storage Yes____ No____
- g) Instructions on registering on recipient's health or immunization card Yes____ No____
- h) Instructions on recording on registration form or tally sheet Yes____ No____
- i) Reinforcement of message for follow-up doses Yes____ No____
- j) Consolidation of registration forms Yes____ No____
- k) Methods for supervision Yes____ No____
- l) Other: please specify _____ Yes____ No____

29. How could training be improved? _____

MONITORING AND SUPERVISION

- INFORMATION SYSTEM**

30. Is there a formal system of information for collecting data on vitamin A supplementation coverage? Yes____ No____
31. Who is responsible for collecting and consolidating information on vitamin A supplementation? _____

32. How is vitamin A supplementation data collected? How often is it collected? _____

- MONITORING AND FEEDBACK**

33. Is feedback on vitamin A supplementation provided regularly? Yes____ No____
34. What kind of information is provided in the feedback (e.g. missed opportunities, incorrect registration, stock check, etc.)? _____

35. Who monitors vitamin A supplementation and provides feedback? _____

36. Who receives feedback on vitamin A supplementation? _____

- SUPERVISION**

37. Is supervision conducted regularly? Yes____ No____
38. Who conducts supervision? _____
39. Describe the strategy for supervision, who conducted the supervision, and the dates of supervisory visits, if any: _____

40. How could monitoring and supervision be improved? _____

COVERAGE DATA

Year	Target population	No. eligible (population)	Total N received vitamin A dose		Total % coverage		No. received a vitamin A dose in national immunization or health campaigns		No. received a vitamin A dose during routine immunization contacts		No. received a vitamin A dose thru MCH and other health services <small>(specify name of program: _____)</small>	
			1 st dose per year (every 6 months)	2 nd dose per year	1 st dose per yr (every 6 mos)	2 nd dose per yr	1 st campaigns	2 nd	1 st dose	2 nd dose	1 st dose	2 nd dose
1996	Children 6-11 months											
	Children 12-____ months											
	Mothers up to 6 weeks											
1997	Children 6-11 months											
	Children 12-____ months											
	Mothers up to 6 weeks											
1998	Children 6-11 months											
	Children 12-____ months											
	Mothers up to 6 weeks											
1999	Children 6-11 months											
	Children 12-____ months											
	Mothers up to 6 weeks											
2000	Children 6-11 months											
	Children 12-____ months											
	Mothers up to 6 weeks											
2001	Children 6-11 months											
	Children 12-____ months											
	Mothers up to 6 weeks											

Which strategies or distribution channels (e.g. national campaigns, routine immunization contacts, etc.) should be used or promoted in order to increase coverage of second dose of vitamin A for children? _____

Elaborate on any constraints (in coordination, operations, logistics, training, monitoring and supervision, etc.) encountered in your vitamin A supplementation program.

Additional comments: _____

Annex 3: Meeting Agenda and Working Group Session Guidelines

INTEGRATED VISION FOR VITAMIN A SUPPLEMENTATION IN THE AMERICAS

Regional Meeting
May 2-4, 2001
Managua, Nicaragua



AGENDA ***(FIRST DAY)***

WEDNESDAY, May 2

- | | | |
|---------------|---|--|
| 09:00 - 09:45 | Opening remarks | Dr. Miguel López, Advisor to the
Minister of Health and Coordinator
Natl Commission on Micronutrients
Dr. Patricio Rojas, PWR-OPS/NIC
Dr. France Bégin, MI
Mrs. Mariángeles Argüello, Minister of
Health |
| 09:30 - 10:00 | Meeting objectives and expected results | Dr. Wilma B. Freire, OPS
Mr. Peter Carasco, OPS |
| 10:00 - 10:30 | Background of the vitamin A supplementation
project and the preliminary results | Ms. Sunny S. Kim, OPS |
| 10:30 - 11:00 | <i>Coffee break</i> | |
| 11:00 - 12:30 | Country presentations (10 minutes per country)
BOLIVIA
BRAZIL
DOMINICAN REPUBLIC
ECUADOR
NICARAGUA
PERU | |
| 12:30 - 13:30 | <i>Lunch</i> | |
| 13:30 - 14:30 | Country presentations (10 minutes per country)
GUATEMALA
HONDURAS
MEXICO
PANAMA | |
| 14:30 - 15:30 | Discussion | |
| 15:30 - 16:00 | <i>Coffee break</i> | |
| 16:00 - 17:30 | Discussion | |

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AGENDA **(SECOND DAY)**

THURSDAY, May 3

- | | | |
|---------------|--|--------------------------|
| 08:30 - 09:00 | Methodology of the working group sessions | Dr. Wilma B. Freire, OPS |
| 09:00 - 10:30 | Working groups – first session
Improving second-dose coverage for children | |
| 10:30 - 11:00 | <i>Coffee break</i> | |
| 11:00 - 12:30 | Working groups – second session
Supplementation of postpartum women | |
| 12:30 - 13:30 | <i>Lunch</i> | |
| 13:30 - 15:00 | Working groups – third session
Monitoring and supervision | |
| 15:00 - 15:30 | <i>Coffee</i> | |
| 15:30 - 17:00 | Plenary session, working group presentations | |
| 17:00 - 18:00 | Working session (with the representatives from each working group)
Summary of the working group presentations | |

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AGENDA ***(THIRD DAY)***

FRIDAY, May 4

- | | | |
|---------------|--|---|
| 08:30 - 09:30 | Presentation of the meeting conclusions | Dr. Wilma B. Freire, OPS |
| 09:30 - 10:00 | Discussion | |
| 10:00 - 10:30 | <i>Coffee</i> | |
| 10:30 - 11:30 | Panel-forum: Role of industry, civil society and agencies of cooperation in the prevention and control of vitamin A deficiency | Mr. Noel Chamorro, CNPA
Ms. Lucy Morren, LIDECONIC
Dr. Juan Aguilar, UNICEF Representative
Dr. Wilma B. Freire, OPS |
| | <u>Moderator:</u> | |
| 11:30 - 12:00 | Use of technology in the monitoring, evaluation and surveillance of micronutrients | Dr. Juan José Amador, General Director of Hygiene and Environment
Dr. Miguel López, Advisor to the Minister of Health and Coordinator of the Natl Commission Micronutrients
Mrs. Karen Ramírez, Information Systems, MINSA
Mr. Peter Carrasco, OPS |
| | <u>Moderator:</u> | |
| 12:00 | Closing remarks | Dr. France Bégin, MI
Dr. Wilma B. Freire, OPS |

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SESSION 1

Thursday, May 3, 2001, 9:00 a.m.

- GUIDELINES FOR WORKING GROUP DISCUSSION -

Improving second-dose coverage for children

1. Identify some *strengths and advances* in providing children with their second doses of vitamin A supplementation for the year.
2. Identify some *weaknesses and problems* in providing children with their second doses of vitamin A supplementation for the year.
3. Propose some *activities* that should be developed in order to increase the coverage of the second dose per year. Consider the different roles and tasks that each program involved in vitamin A supplementation should be executing in order to assure inter-programmatic coordination.

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SESSION 2

Thursday, May 3, 2001, 11:00 a.m.

- GUIDELINES FOR WORKING GROUP DISCUSSION -

Supplementation of postpartum women

1. Identify some *strengths and advances* in vitamin A supplementation of women immediately in their postpartum period.
2. Identify some *weaknesses and problems* in vitamin A supplementation of postpartum women.
3. Propose some *activities* that should be developed in order to increase the coverage of supplementation of postpartum women. Identify the programs responsible for the activities, and consider the different tasks that each program involved should be executing in order to assure inter-programmatic coordination.

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SESSION 3

Thursday, May 3, 2001, 1:30 p.m.

- GUIDELINES FOR WORKING GROUP DISCUSSION -

Monitoring and supervision

1. Identify some *strengths and advances* in monitoring and supervision of vitamin A supplementation.
2. Identify some *weaknesses and problems* in monitoring and supervision of vitamin A supplementation.
3. Propose some *activities* that should be developed in order to improve the system of monitoring and supervision for vitamin A supplementation. Consider the different roles and tasks that each program involved in vitamin A supplementation should be executing in order to assure inter-programmatic coordination.