

-PD-ABS-610  
BSN 9/120

THIRD  
ANNUAL REPORT  
OCTOBER 1988 - SEPTEMBER 1989  
  
PHILIPPINES  
(GRANT NO. DAN-0045-G-SS-6068-00)

PREPARED FOR S&T/OFFICE OF NUTRITION  
AID/WASHINGTON

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I. INTRODUCTION

Helen Keller International (HKI) has been working closely with the Government of the Philippines (GOP) in an effort to reduce blindness, morbidity and mortality associated with vitamin A deficiency (VAD). The major objectives of the joint effort remain the same as those described in the Second Annual Report:

- (1) the reduction of vitamin A deficiency through the integration of vitamin A supplementation into existing Primary Health Care (PHC) activities; and
- (2) the development of an effective low-cost method of achieving long-term adequate vitamin A status among preschool children.

To achieve these objectives, the Department of Health (DOH) and HKI developed and are implementing 4 projects as part of this grant. The components, while unique in themselves, form a multipronged and comprehensive approach (i.e., vitamin A supplementation, social marketing, food fortification, vitamin A policy development) in controlling and preventing vitamin A deficiency. The projects are the same as those described in the Second Annual Report.

The 4 projects are:

1. Service Delivery/Capsule Distribution: An integrated community-based service delivery system to control and prevent vitamin A deficiency in rural and urban-depressed communities.
2. Supplementation Policy Formulation: Vitamin A Dosage and Side-Reaction Study
3. Nutrition Education: Social Marketing Strategies to Prevent and Control VAD
4. Fortification: Fortification Plan for DOH

Although each of the projects will be described separately, several aspects of project implementation are common:

- \* HKI acts as a catalyst, support and technical assistant for program activities and not as a direct service provider. The lead implementing agency is essentially the Department of Health (DOH), under the Nutrition Service (NS); and all program activities are dependent on the service capability of the DOH system.

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- \* HKI works to build capability within the DOH system and DOH personnel. DOH personnel are involved with all aspects of program development and implementation.

PROJECT 1: Service Delivery/Capsule Distribution:

An integrated, community-based service delivery system for Vitamin A Deficiency Prevention and Control in rural and urban-depressed communities.

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I. Project Design Summary:

The project aims to integrate periodic vitamin A supplementation with existing health services, as well as intensify and improve nutrition education aimed at changing behaviors which compromise the vitamin A status of children. The integration of vitamin A supplementation into the existing health system is being done through trainings of health personnel in case detection, treatment, management and prevention. The project has designed training, supervision, monitoring, logistics and community support components which "ride on" existing activities and systems. The distribution scheme being used is a targetted scheme in which frank cases of xerophthalmia are treated and high risk children (malnourished, chronic diarrhea, measles, and ARI) are given prophylactic supplements.

This project, initiated in a depressed rural area (province of Antique) and in the urban slums (municipality of Las Pinas, Metro Manila) will provide urban and rural models for the integration of vitamin A activities for each setting.

A. Objectives:

There is no change in objectives from the Second Annual Report.

B. Priority Population

In the rural project site, the Province of Antique, there are approximately 90,000 children between 1 and 7 years. The project targets all of these children for case detection, but only provides supplements for children with xerophthalmia and considered at high-risk for VAD (ie. prolonged diarrhea, 2nd or 3rd degree malnourished, recent measles cases, acute respiratory infections).

In the urban project site, the municipality of Las Pinas, only the depressed slum villages are targeted. The estimated number of children between 1 and 7 years in the

slum villages is approximately 21,000. All children are targets for case detection, but only children with xerophthalmia and considered high-risk are given VAC supplements.

In summary, the size estimate of preschoolers being targeted is:

Antique Province	90,000
Las Pinaz Province	<u>21,000</u>
Total	111,000

Note that there is no change in location from the Second Annual Report, but a slight increase in estimated population size.

C. Strategies for Identifying and Providing Follow-Up Services to People at Higher Risk:

No change from second annual report.

D. Child Survival Interventions

No change from second annual report.

E. Improvements in Program Quality

Steps taken to improve program quality include:

1. Program Review:

- a. Regular monthly progress revisions continue at the field implementation level with Regional and Provincial technical staff of the DOH. An assessment of the accomplishments set against objectives for each project component was conducted. Quarterly progress reviews were also continued at the DOH National level during which DOH and HKI technical staff discuss project activities, problems and plans with the DOH Nutrition Service Chief.
- b. Consultative Conferences: Two successful consultative conferences were conducted, one in Antique and the other in Las Pinaz. These conferences served to help the health personnel review the accomplishments and problems encountered during the implementation of the project over the past 2 years. These conferences brought together field implementers (midwives,

nurses and physicians) with policy makers at the regional and national levels. Highlighting the conferences was the participation of Dr. Manuel Roxas, Undersecretary for Public Health Services. The forums helped to bridge the gap in perspective between field implementers and policy makers, and contributed to the growing interest of mounting a larger vitamin A deficiency prevention and control program in the country.

During the conferences gaps in implementation were identified, particularly in the area of monitoring. Reorientation of health personnel was recommended to ensure that case detection of xerophthalmia and high-risk children is routinely and effectively integrated into other health services.

2. Revision of Routine Monitoring Forms: Routine monitoring forms were revised and simplified, pretested and printed for use in Antique. See sample forms in appendix 5.
3. Provision of Under-six Cards: HKI assisted in modifying the DOH under-six card to incorporate vitamin A capsule delivery. 50,000 cards were reproduced for Antique and Las Pinas, and will be used as the child's record of VAC receipt. See sample USC card in appendix 7.
4. Training/Retraining of Health Personnel: Retrainings have been conducted as part of other trainings of the DOH such as staff conferences, VADAG trainings and other sessions in Antique and Las Pinas.
5. Community Support Activities: The project has attempted to strengthen the DOH's capability in establishing linkages with other GOs, particularly the Depts. of Education and Agriculture, as well as active NGOs. GOs and NGOs exhibit a high degree of awareness of the VAD program, but not much in actual substantive collaboration is evident. This is an area in which the project must improve its efforts.

F. Response to Technical Review of CSIV DIP:

Not relevant for CSII project.

## II. Linkages to Community, Government and NGO Health Activities

Linkages have been established throughout the implementation of the CSII grant, primarily with the Departments of Education (DECS), Agriculture (DAF) and Social Welfare (DSWD). The linkages are not direct linkages with HKI; instead, they are with the DOH. HKI has acted to try to strengthen the DOH's capability to link with existing agencies and organizations.

On paper, these linkages appear to be well-endorsed. In reality, there have been difficulties in actualizing commitments.

## III. Human Resources

1. Local administrative and technical support remained the same as in year 2 of the project, except for the position of financial officer which was assumed by Ms. Virgie Abareles who replaced the former financial officer, Ms. Rose Velasco.

Local consultants for the past year have included:

- \* Prof. Nestor Ranesis for systems analysis.
- \* Arlene Abueg for data processing.
- \* Dr. Florentino Solon for participation in major consultative workshops.

An updated organizational chart of HKI/Philippines can be found in Appendix 23.

2. HKI headquarters technical assistance from October 1988 to September 1989 has included:
  - \* Mr. Jeffrey Watson, former HKI/Philippines Country Director, assumed the headquarters post of Asia-Pacific Regional Manager. Along with the Asia Desk Officer, Pam Stebbins, he provided administrative backstopping to the project. Mr. Watson took part in the mid-term evaluation of the project in November 1988 and provided fiscal year planning assistance during a visit to the Philippines in May of 1989.
  - \* Visit from Dr. Alfred Sommer, HKI Medical Adviser, during June 1989.
  - \* Technical backstopping from Susan Eastman, HKI/NY Director of Vitamin A Programs.

3. AID sponsored technical support included:

- \* Visit by Dr. Francis Davidson of the S&T Nutrition Bureau to briefly assess HKI vitamin A activities and the need for future support.

IV. Project Health Information Systems

A. Surveys

1. Special Monitoring Study: A special monitoring study was conducted in April for Antique and during June and July for Las Pinas. The study aimed to obtain information on the quality and extent of project implementation with regard to the following areas: a) case detection of xerophthalmia and high-risk children; b) integration of vitamin A services into OPT, USC and TFAP; c) community perception of vitamin A services; d) use of educational materials and the conduct of nutrition counselling; and e) the establishment of community linkages.

The survey protocol and the executive summary of findings are included as appendix 3 and 4, respectively. Briefly, the methodology used included an actual skills test and written examination of a sample of health workers, and in-depth interviews and record review of health workers and mothers. The questionnaires were developed with the DOH health staff and pre-testing of the instrument was conducted. The interviews were conducted by a team of data collectors (non-DOH), under the supervision of HKI and DOH technical staff. The entire data collection took about 2 weeks. Data was coded and entered into a micro-computer (D-base III plus program). Feedback meetings were held with provincial DOH technical staff. The entire cost of the study was about \$1500.

Findings of the study indicated:

- \* Health workers, in general, had sufficient knowledge of signs of xerophthalmia and high-risk conditions, and the treatment and prophylaxis schedule. Areas needing improvement included dietary counselling and counselling of mothers on potential side-effects of supplementation (a sensitive issue in the Philippines).
- \* In terms of actual skills in case detection, 80% of the nightblindness cases were diagnosed by all

levels of health workers (except the volunteers). There was only 1 actual Bitot spot among the 90 children examined. This was overlooked by the majority of health workers; although a midwife and village health worker correctly identified the symptom. Regarding the high-risk conditions (i.e. chronic diarrhea, ARI, malnutrition, and measles) many of the cases were misdiagnosed. This is particularly disconcerting since these are by far the larger group, and represent the at-risk children. Collectively, the findings indicate the need for continuous and regular reorientation among the health staff.

2. Endline Survey:

As indicated in the DIP and 2nd Annual Report, an endline survey to assess project impact was to be undertaken. The survey protocol was developed and is identical to the baseline survey protocol (although some slight modifications have been made to obtain supplemental data). The endline survey protocol is attached as appendix 1.

Data collection began in August 1989, after recruiting and training the survey team members and will continue through September 1989. Preschoolers in forty-nine randomly selected villages in the province of Antique are being examined for clinical signs of xerophthalmia. Questionnaires to obtain information on the KAP of mothers with regard to vitamin A deficiency and coverage rates of vitamin A supplementation are being administered. Once coded, the data will be entered into D-base III Plus, and statistical runs using SPSS will be done.

A similar survey, although on a much smaller-scale is planned for the urban project site, Las Pinas, in November 1989.

B. Indicators

Distribution of Vitamin A Supplements: Active case detection and treatment of xerophthalmia, prophylactic distribution of vitamin A to "high risk" children and nutrition education to prevent vitamin A deficiency are the key interventions of this project.

Tier I indicators for which the project has collected data include:

- \* # of children examined for xerophthalmia
- \* # of children with xerophthalmia
- \* # of xerophthalmia cases given VAC treatment
- \* # of high risk children detected
- \* # of high risk children given VAC
- \* # of nutrition education classes conducted (for VAD)
- \* # of mothers reached by nutrition education classes

Tier II indicators which the project is collecting data on include:

- \* % of children with xerophthalmia given treatment VAC
- \* % of high risk children given prophylactic VAC
- \* % of mothers reached by nutrition education of VAD

Data for Tier I indicators is being collected through the DOH data collection system. Specialized reporting forms have been developed and integrated into the DOH system. Sample forms, which have been modified since the 2nd Annual Report, are included in Appendix 5.

Problems encountered in data collection include:

1. Questions of accuracy and completeness common to data collection of most DOH programs.
2. Difficulty of establishing population-based denominators for xerophthalmia and high-risk prevalence. For example, the DOH targets all 2nd and 3rd degree malnourished children, chronic diarrhea, post-measles and lower respiratory infection cases for prophylactic supplementation. Since these conditions vary by season and community, it is difficult to determine an accurate denominator for measuring effectiveness (eg. prophylactic supplementation coverage rates).

### C. Midterm Evaluation

A midterm evaluation was conducted from November 14-19, 1988 by Dr. Dana Copp (independent consultant contracted by HKI) and Jeff Watson (HKI Asia-Pacific Regional Manager). Interviews with key HKI technical staff, DOH counterparts at the national, regional and provincial levels and field visits to both Antique and Las Pinas were conducted. The main findings included:

- \* DOH personnel from the national to the field implementation level appeared well-informed about the project and were enthusiastically implementing proposed interventions;
- \* excellent relations between HKI technical staff and key DOH counterparts;
- \* at the time of the midterm evaluation project impact could not yet be determined as monitoring data was still insufficient;
- \* project decisions and activities subject to delays due to centralized and bureaucratic coordination mechanism established with the DOH;
- \* presence of substantial external factors which impeded project progress (fear of vitamin A toxicity emanating from Bicol Mortality Study, reorganization of DOH, change of key counterparts, etc.)

In light of these findings, HKI has:

- \* tried to work with the national DOH project staff to decentralize the planning and approval process for project activities;
- \* conduct more rigorous monitoring exercises to assess project accomplishments and status;
- \* assist the DOH in developing a 5-Year Directional Plan for expanding and sustaining vitamin A activities in the Philippines.

The mid-term evaluation report was shared with appropriate DOH staff at the national, regional and provincial levels. Verbal debriefings with appropriate personnel were conducted by the midterm evaluators prior to their return to the the US to write up their report.

A copy of the midterm evaluation report is included as appendix 9.

## V. Work Plan and Constraints

### A. Constraints/Issues

- \* Shortage of DOH Personnel. Delays in project implementation have been apparent due to the shortage

of personnel at the national level to follow-up on the numerous planned activities.

- \* Role of HKI in DOH Expansion Program. Currently, HKI support of vitamin A activities comes from CSII funds and Hoffman La Roche. The bulk of support (for HKI staff, development and production of materials, project monitoring costs, etc.) comes from the CSII grant. While sufficient to cover expenses related to the projects in Antique and Las Pinas, resources are insufficient to support major expansion activities. Given AID's recent decision not to fund the proposal for expanded vitamin A activities which HKI submitted in December 1988, the extent of our support of DOH expansion efforts will be limited. This puts HKI in a difficult situation, as we have supported the pilot programs which have led up to current expansion efforts. Similarly, the DOH has allocated minimal resources to vitamin A activities until 1991.

#### B. Revised Workplan

During the next twelve months activities will focus on "phasing out" of the Antique and Las Pinas areas, and helping the DOH to expand its activities to other regions.

Phasing Out activities will include:

1. Endline Survey: Initiating and conducting an endline survey in both Antique and Las Pinas to determine prevalence levels of xerophthalmia and VAC coverage rates.
2. Completion of Integrated Vitamin A Lessons Plans in the Antique school curriculum. This is a follow-on to the teacher trainings conducted last year, and a way of strengthening actual output of the collaboration between the DOH and DECs.
3. On-going Retraining of Health Personnel.
4. Strengthening of the Monitoring System through continuous monitoring and supervisory visits.
5. Year-end Project Review Consultations at the regional and provincial levels to plan and assist with each level completely taking over responsibility for the program.

Expansion Activities will include:

1. Completion of materials for the "training package" in preparation for the national and regional trainings. This package will include a training video, training guide, a "how-to's" manual, case detection reference poster and other communication materials produced as a part of the social marketing project in Region 6.
2. Formation and training of a national core group of trainers from the DOH who will conduct the regional/provincial trainings. See Protocol for Training Workshop for National VADAG Core Trainers in appendix 10.
3. Regional and provincial training in vitamin A. This training scheduled for September will train two members of the DOH technical staff from each region in the country and two members of the technical staff from selected provinces (one province per region).

Attached is a revised workplan for the rural and urban projects.

<u>ACTIVITY</u>	<u>TIMEFRAME</u>			
	<u>1989</u> <u>4th QTR</u>	<u>1ST QTR</u>	<u>1990</u> <u>2ND QTR</u>	<u>3RD QTR</u>
1. Endline Survey	xxxx			
2. Workshops with Provincial staff to "phase-out" and turn-over responsibility.		xx	xx	
3. Orientation of GOs and NGOs		xxxx		
4. Identification of Targets	xxxx	xxxx	xxxx	xxxx
5. Distribution of VAC	xxxx	xxxx	xxxx	xxxx
6. Nutrition Education Activities	xxxx	xxxx	xxxx	xxxx
7. Consultative Conference			x	

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8. Documentation  
(Data Analysis)

x            xxx

9. Project Result  
Presentation

xx

PROJECT II: Supplementation Policy Formulation:

Vitamin A Dosage and side-reaction study.

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I. Project Design Summary

This is not a project per se. Initially, it consisted of a simple study designed to help the DOH address its concerns about "toxicity" which arose from sensationalized claims in connection with the Bicol Mortality Study in 1986. In 1987, a study to examine the extent and severity of side-reactions with varying dosage strengths of vitamin A was conducted collaboratively with the DOH, FNRI and HKI. The results of the study were to form part of a basis for DOH policy on vitamin A supplementation dose and schedule.

Since the conduct of the study, HKI has assisted the DOH in bringing together representatives from professional groups (pharmacologists, pediatricians, nutritionists), heads of nutrition institutes and other concerned professionals to formulate policy recommendations for a DOH vitamin A supplementation program. From this effort, HKI has assisted the DOH in developing a 5-year directional plan for 4 key strategies to prevent and control VAD.

A. Objectives

Compared to the Second Annual Report the objectives have broadened to focus on policy formulation and planning an overall DOH strategy to prevent and control VAD including interventions other than supplementation (nutrition education, fortification and agricultural production).

B. Priority Population:

(There have been no changes in size or location since the Second Annual Report.)

C. Strategies for Identifying and Providing Follow-up Services to People at Higher Risk:

While the project does not directly implement strategies for identifying people at higher risk, this concern has been of major importance in developing an appropriate supplementation policy.

D. Child Survival Interventions

(There have been no changes in type or scope of service suggested from the First Annual Report.)

E. Improvements in Program Quality

To ensure that results from the dosage study would be translated into policy recommendations HKI sponsored the following:

Consultative Meeting: HKI sponsored a consultative experts meeting led by the DOH and participated in by representatives from WHO, UNICEF, Food and Nutrition Research Institute, Nutrition Center of the Philippines, UP School of Medicine, UP Professor of Nutrition, Medical Action Group, and Philippine Pediatric Society. During the forum participants developed and agreed upon guidelines for the dose and frequency of distribution of vitamin A supplements, supplement preparation, and means of supplement distribution. The proceedings of this meeting are included in appendix 13. The recommendations were subsequently presented to the DOH Executive Management Committee for approval and approved. Copies of the guidelines on the treatment of xerophthalmia are appended as Appendix 11. Copies of the guidelines on prophylaxis supplementation on appended as appendix 12. These are being circulated to all regions and provinces in the Philippines for compliance by the DOH field implementors by the Nutrition Service.

Development of 5-Year Directional Plan: HKI assisted the DOH in developing a directional plan consisting of 4 major strategies to prevent and control vitamin A deficiency. The plan identifies the major implementation steps, timeframe for implementation and resources needed. A copy of the plan is provided in Appendix 14.

F. Response to Technical Review of CSIV DIP

Not relevant for CSII project.

II. Linkages to Community, Government and NGO Activities

1. New linkages with organizations have been forged through the dissemination of study results and the conduct of consultative workshops to discuss and develop policy recommendations. The DOH Nutrition Service and HKI hosted a consultative workshop to translate study findings into policy recommendations. Participants in these activities included members of

nutrition institutes and professional societies, the University of the Philippines Department of Pharmacology, DOH personnel, UNICEF, Institute of Ophthalmology, WHO and DOH and HKI personnel.

2. With a clear DOH policy guideline on vitamin A supplementation, HKI has explored linkages with CARE/Philippines, Save the Children, and UNICEF. HKI sponsored the DOH Launching of a National Vitamin A Prevention and Control Program, during which UNICEF, CARE/Philippines, WHO, DECS, and DAF pledge support.

### III. Human Resources

No changes in project staffing since Second Annual Report.

### IV. Project Health Information Systems

#### A. Community Survey

Not appropriate for this project.

#### B. Indicators

Not appropriate for this project.

#### C. Midterm Evaluation

As previously mentioned, midterm evaluation was conducted in November 1988.

### V. Work Plan and Constraints

#### a. Problems and Constraints:

Problems and constraints reported in Second Annual Report have by and large been overcome. The results of the dosage study have been disseminated. A three-day "write-shop" was conducted with the DOH and FNRI technical staff to develop policy recommendations. Additional consultative meetings were conducted with health professionals for reaction to proposed policy recommendations. Additional data from the field implementation of 200,000 IU supplementation being carried out in the Province of Antique and Las Pinas were obtained on side-effects experienced in the field.

A strategy of working towards an acceptable policy focusing on the therapeutic dose for xerophthalmia cases was pursued first since this was least controversial. Once this was agreed upon and officially endorsed, the more controversial prophylactic policy recommendations were pursued.

Key senior DOH staff participated in the Regional Vitamin A Meeting in Indonesia in November 1988, which gave them an opportunity to exchange concerns and experiences with professionals from other countries. A subsequent consultative meeting was convened (January 1989) to tackle the dosage recommendations for prophylactic supplementation.

Initial objectives of this "project" have been accomplished. A supplementation policy for treatment of xerophthalmia cases and for prophylaxis of high-risk cases has been established and adopted by the DOH. (See appendices 11 and 12).

In order to expand vitamin A services to areas beyond the pilot projects, HKI has assisted the DOH in formulating a 5-year directional plan. This plan incorporates vitamin A supplementation, nutrition education, fortification and agricultural production. For a copy of the plan, see appendix 14. Major constraints are anticipated in the implementation of these strategies on a national scale. These include:

- \* Financial Resources to put the 5-year directional plan into action. Specifically, resources for the training of health personnel in case detection and treatment of xerophthalmia and high-risk conditions; procurement of vitamin A supplements; production of adequate nutrition education materials; etc.
- \* Manpower Resources to conduct needed trainings of health personnel.

b. Strategies to Overcome Constraints

- \* Assist the DOH to link with funding agencies such as UNICEF, WHO and the USAID/Manila mission.
- \* Develop a core of trainers who can serve as resources during the trainings to be conducted in the various regions and provinces of the Philippines as part of the DOH vitamin A expansion program.

c. Revised Workplan

<u>Activity</u>	<u>4th</u> <u>'89</u>	<u>1st</u> <u>'90</u>	<u>2nd</u> <u>'90</u>	<u>3rd</u> <u>'90</u>
* Finalization of DOH Prophylactic Policy and Dissemination	xxx			
* Training of Core Trainors	xxx			
* Training of Reg'l and Prov'l Core Trainors	xxx	xx		
* VAD Newsletter publication	x	x	x	x

PROJECT 3: Nutrition Education

Social Marketing Strategies to Prevent and Control VAD

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I. Project Design Summary

This project aims to improve health behavior and feeding practices concerning VAD through the implementation of a communications strategy. It employs mass media, graphics and other channels of communication to reach target mothers (of preschooler children), pregnant women and breastfeeding mothers. A uniform message constantly recurs in the form of "feed your children/eat daily at least half a cup of green leafy vegetables cooked with oil for good health". The objective is to upgrade the frequency and quantity of feeding and eating practices relative to vitamin A rich food. The project area covers the entire Western Visays region (Region 8) composed of Aklan, Capiz, Antique, Iloilo, Negros Occidental, and Guimaras, and targets 2.7 million females of reproductive age.

A. Objectives

The project objectives are to:

1. increase the consumption of locally available vitamin A rich foods and oil among preschool children through the use of interpersonal and mass communication channels.
2. demonstrate the benefits of the social marketing approach for preventing vitamin A deficiency.
3. provide a model for developing social marketing related vitamin A programs for other regions in the Philippines.

The objectives are the same as those reported in the Second Annual Report.

B. Priority Population

This project is aimed at mothers of preschool age children, pregnant women, nursing mothers, weaning age children (6-12 mos) and preschool children (1-7 years). The project is located in Region VI with an estimated target population breakdown as follows below. There are no changes in priority population from those reported in the Second Annual Report.

Infants 0-12 months	160,000
Children 12-35 months	450,000
Children 36-83 months	<u>500,000</u>
Subtotal	1,110,000
Women of reproductive age	1,240,000
Total	2,350,000

C. Strategies for Identifying and Providing Follow-up Services to People at Higher-risk:

No changes from those strategies described in the Second Annual Report.

D. Child Survival Interventions

Through the use and influence of mass media and health workers, the project attempts to create attitudinal change among mothers that would result in behavior change. The envisioned behavior is the daily preparation and feeding of green leafy vegetables, yellow fruits and other vitamin A rich foods together with oil in the child's diet.

The mass medium used is radio which is able to penetrate even remotely located villages while health workers use interpersonal channels to convey information regarding the causes, consequences and actions to prevent VAD.

E. Improvements in Program Quality

1. Special Monitoring Study: A special monitoring study conducted in February 1989 by the Central Philippine University (CPU) established message awareness at 90% of sampled mothers, principally on account of radio's penetration. Subsequently, efforts at intensifying message dispersal and fine-tuning of the original message were made. A report of this study is included as appendix 18.
2. production of more communication materials such as:
  - a. three comic hand bills distributed through the Rural Health Units and Barangay Health Stations;
  - b. three poster versions of the handbills installed at health centers;

- c. one display poster at retail stores;
- d. two vehicle stickers for tricycles and jeepneys
- e. one flier distributed in all cities;
- f. a promotional T-shirt worn by health workers
- g. billboards in three locations;
- h. streamers in three locations;
- i. two types of radio spots translated in three different dialects.

Numbers of materials produced and unit cost listing is provided in appendix 20. Translations of the comics and radio spot scripts are included as appendix 16 and 17 respectively.

3. A redesigned media plan that considered findings of the monitoring study.
4. Maximized the potential contribution at no-cost of other radio stations not included in the media plan through "donated" spots made available to the project.
5. Special promotional projects, notably
  - \* participation in a Mardi Gras parade in the city
  - \* vitamin A quiz program on radio
  - \* direct mailers to frontline workers with cash prizes at stake to assist us in monitoring materials displayed
  - \* orientation of town mayors in one province
  - \* tie-ups with private companies (Colgate Palmolive, Unilab, Pepsi) especially in materials distribution.
6. Health worker training in specific skills (e.g., sound production skills) and in social marketing message distribution to target mothers. HKI sponsored a one-week sound production workshop where the nutritionists and health educators from each province produced radio spots for airing in their respective provinces.
7. Monitoring of health worker training activities and of the participation of non-governmental organizations in message and material distribution in the communities they serve. Both Save the Children and Catholic Relief Services have been particularly active.
8. Feedback conferences with project implementors.

F. Response to Technical Review of CSIV DIP

No relevant to CSII grant.

II. Linkages to Community, Government and NGO Health Activities

1. Provincial Task Forces: HKI has assisted the DOH in forming provincial task forces on social marketing. There are six task forces, one for each province in the region. These have enlisted the participation/membership of other sectors, notably local radio stations, agriculture and education officials whose work can directly support the project's objectives.
2. Non-governmental Organizations: There are about thirty (30) identified non-governmental organizations in Region VI with health/nutrition related programs. Representatives of these organizations have been invited to a conference during which the vitamin A deficiency problem was presented and their assistance sought. Again, HKI has sought to promote a linkage between the DOH and these organizations, instead of a direct linkage with HKI.

Even without formal agreements, project print and educational materials are regularly sent to these NGOs. Many have used the materials in their own programs, particularly during the conduct of education classes. See appendix 15 for samples of VAD Update Newsletter sent to NGOs quarterly.

3. Local Media Groups: Radio stations have cooperated in message dissemination, notably in co-producing special radio programs on VAD, airing prepared spots at no cost to the project, inviting health authorities to discussion/interview programs, and printing/airing press releases.
4. Agreements: No new agreements between this project and the DOH have been established. Those reported in the Second Annual Report remain in effect.

III. Human Resources and Technical Support

1. HKI Staff

No change since Second Annual Report. HKI staff providing direct assistance to this project include:

Rolf D.W. Klemm, Country Director  
Virgilio Pernito, Communications Adviser  
Juvy Maloto, Technical Assistant  
Annie Escolano, Administrative Assistant

2. Local Technical Assistance

Together with the DOH, HKI contracted the services of an advertising firm, J. Romero and Associates to create and produce communication materials, develop a media plan, and arrange the broadcasting of materials according to the plan. In addition, HKI has contracted with individual artists for the creative production of posters and other materials.

3. AID-sponsored Technical Assistance

Ashok Sethi, a consultant from the Manoff Group provided technical assistance in February 1989. He was able to review project progress, assist in finalizing the design of a special monitoring study, and assist in the production of additional communication materials. A copy of his consultancy report is included as appendix 19.

Nancy Torrey, a consultant from the Manoff Group provided technical assistance in August 1989. Ms. Torrey assisted in finalizing the protocol for a second special monitoring study and participated in a workshop to develop a nutrition education module for VAD.

IV. Project Health Information Systems

1. First Special Monitoring Study: Conducted in February 1989, this study sought to assess program implementation 6 months after the launching of the program. It sought to determine effectiveness of the materials for the target groups so that changes and necessary modifications could be made to the materials and media plan. Specifically, it attempted to find out:
  - \* if messages reached mothers
  - \* what mothers remembered from the messages
  - \* what mothers reactions were to the messages
  - \* if health workers were using teaching aids
  - \* problems health workers have in conducting nutrition education.

The study employed individual depth interviews among mothers and health workers. One hundred and twenty (120) mother beneficiaries, twenty-four (24) village health volunteers and twelve (12) rural health midwives served as respondents of the study. Two of the six provinces in the region were purposively selected for inclusion in the study on account of socio-demographic characteristics, readiness, and stage of project implementation in the respective province. In each of these two (2) provinces, four (4) towns (municipalities) were randomly chosen. In each town, three (3) villages were randomly selected. In each village ten (10) mothers, two (2) village health volunteers and one (1) midwife was interviewed.

The questionnaires were developed jointly by the DOH, HKI and the Central Philippine University (CPU). Data for the study were gathered by five (5) research assistants who were supervised by two (2) field supervisors. Data collectors were trained on how to conduct in-depth training with special focus on the technique of probing.

A detailed report of the methodology, analysis and recommendations is included in appendix 18.

2. Second Special Monitoring Study: A second special monitoring study was initiated in September 1989 and is still on-going. The objectives of the study are similar to the first study, however, it focuses on the new educational materials produced since February 1989.

C. Midterm Evaluation

See description of findings earlier reported under Project I.

V. Workplan and Constraints

1. Problems and Constraints:

- \* Transfer of Skills: Currently HKI works closely with the Nutrition Service staff and regional nutritionists in the implementation of the social marketing project. Attempts at transferring skills such as script development, editing, material conceptualization and production and other technical skills show slow skill

acquisition. It is questionable whether these skills can or should be fully integrated into the DOH so that the DOH can mount a communications program on a professional level independent of outside assistance.

- \* Media Coordination. Given the present DOH structure, there is a rift between the "technical" divisions such as nutrition, and the information divisions such as public relations. It appears that the DOH at the regional level needs to develop a coordination mechanism between the two divisions to facilitate the implementation of a social marketing effort at that level.
- \* Logistics: The current level of expenditure for radio time, print media and other materials is probably significantly higher than the resources present in the immediate plans of the DOH. While HKI has explored with the DOH the use of in-house printing facilities to minimize costs, the requests often cannot be accommodated. Resource constraints, unless in-house DOH sources are tapped or professional resources donated, will limit the replicability of the current communication effort.

2. Revised Workplan

Activity	1989	1990		
	4th Qrt	1st Qrt	2nd Qrt	3rd Qrt
1. Implementation of Radio Campaign	XXXXX			
2. Training of Health Workers	XXXX			
3. Health Worker Training of mothers	XXXXXXXXXXXXXXXXXXXXXXXXXXXX			
4. Orientation of GOs and NGOs	XXXX			
5. Production of Additional Communication Material	XXXXXXX			
6. Consultative Conference	XX		XX	
7. Regular Monitoring	XXXXXXXXXXXX			
8. Special Monitoring Studies	XX			
9. Endline Survey		XX	XXXX	

PROJECT 4: Fortification

Feasibility of Nutrification as a Strategy to Prevent VAD

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I. Project Design Summary

This effort aims to assist the DOH in reassessing nutrification as a strategy to prevent VAD. In 1987, the DOH with support from HKI, commissioned a study to re-examine the MSG fortification experience in the Philippines and Indonesia. In 1988, HKI catalyzed and supported a DOH fortification task force visit to Indonesia which led to a Philippine-Indonesian Partnership Agreement. Later in 1988, HKI sponsored the participation of two DOH representatives to a Regional Vitamin A Conference which highlighted fortification and addressed issues related to the safety of MSG.

A. Objectives

Remain as stated in the Second Annual Report, except that the conduct of a rigorous MSG consumption study has been broadened to include the conduct of a study to identify the dietary intake and consumption of vitamin A fortifiable foods.

B. Priority Population

No change from Second Annual Report.

C. Strategies for Identification of High-Risk Groups

The food consumption study is being carried out in economically depressed communities which are assumed to have a relatively high prevalence of vitamin A deficiency.

D. Child Survival Intervention

No change from Second Annual Report.

E. Improvements in Program Quality

1. Sponsorship of Senior DOH Staff to Regional VAD Conference in Indonesia. HKI sponsored the participation of Dr. Lilia Aranas (Assistant to the Undersecretary for Public Health Services) and Mrs. Adelisa C. Ramos (Chief of the Nutrition Service) to the Regional VAD conference in

Indonesia in November 1988. The conference highlighted fortification efforts in Indonesia and attempts in Bangladesh. In addition, both DOH representatives attended a presentation made by Professor Rand, chairman of the WHO experts committee on food additives, on the safety of MSG.

F. Response to Technical Review of CSIV DIP

Not relevant for CSII grant.

II. Linkages to Community, Government and NGO Health Activities

Not applicable in this phase of the project.

III. Human Resources and Technical Support

1. New Staff

No new staff added for this undertaking.

2. Local Technical Assistance

The food consumption study has been contracted out to Dr. Cecilia Florencio, Professor of Nutrition from the University of the Philippines. She has assembled a group of researchers from affiliated universities to undertake the conduct of the food consumption study.

IV. Project Health Information Systems

- A. Food Consumption Survey: The first step to arrive at a vehicle of choice is the conduct of a food consumption study to determine consumption levels and frequency of intake of potentially fortifiable foods consumed by at risk children. Together with the DOH, HKI has commissioned Dr. Cecilia Florencio, Professor of Nutrition from the University of the Philippines, to undertake such a study. The study will be a multi-campus endeavor involving staff from the University of the Philippines in Diliman, Manila, Los Banos and Iloilo. The group has been meeting since May to finalize the methodology and data collection instruments. Data collection began in August with final results expected in January 1990. A copy of the study proposal is attached as appendix 22.

B. Indicators

Variables to be included in the survey are described in the study proposal attached as appendix 22.

C. Midterm Evaluation

See description of midterm evaluation included in earlier section under Project I.

V. Work Plan and Constraints

The actual conduct of the food consumption study is all that is planned for the remainder of this project. Once the results are in, there will be the need for a second generational study to look into the feasibility of the identified foods.

Constraints:

1. There is uncertainty about the extent to which the DOH is committed to pursuing fortification. The question of who at the DOH will take a leadership role in advocating for fortification and pushing it ahead, even in the face of opposition, is still an issue.
2. Resources to pursue the development of a technology to fortify an identified foodstuff and field test the product will need to be sought as the current CSII grant cannot support such an effort.

Revised Workplan

<u>ACTIVITY</u>	<u>1989</u>	<u>1990</u>		
	<u>4th</u>	<u>1st</u>	<u>2nd</u>	<u>3rd</u>
1. Conduct of Consumption Study	XXXX			
2. Report and Feedback		XXXXXXXXXX		
3. Plan for Feasibility Study			XXXXXXXXXX	

PROJECT EXPENDITURES

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HELEN KELLER INTERNATIONAL, INC.  
 1989 ANNUAL REPORT FORM A: COUNTRY PROJECT PIPELINE ANALYSIS  
 FVC / COUNTRY PROJECT- DAN-0045-G-SS-6066-00

PHILIPPINES	ACTUAL EXPENSES TO DATE (9/30/86 to 9/30/89)			PROJECTED EXPENSES AGAINST REMAINING OBLIGATED FUNDS (10/1/89 to 4/30/90)			TOTAL AGREEMENT BUDGET (9/30/86 to 4/30/90)		
COST ELEMENTS	AID	HEI	TOTAL	AID	HEI	TOTAL	AID	HEI	TOTAL
PERSONNEL / FRINGES	\$247,451	\$67,650	\$315,101	\$68,767	(\$31,834)	\$36,933	\$316,218	\$35,816	\$352,034
ALLOWANCE	\$45,384	\$3,286	\$48,670	\$49,958	(\$3,286)	\$46,672	\$95,342	\$0	\$95,342
CONSULTANTS	\$22,735	\$18,136	\$40,871	\$16,765	\$11,242	\$28,007	\$39,500	\$29,378	\$68,878
EQUIPMENT / SUPPLIES	\$66,664	\$16,471	\$83,135	(\$40,463)	\$92,955	\$52,492	\$26,401	\$111,426	\$137,827
TRAINING	\$20,134	\$1,137	\$21,271	(\$4,939)	\$57,760	\$52,821	\$15,195	\$56,657	\$74,092
TRAVEL	\$48,768	\$15,595	\$64,363	\$9,408	\$10,548	\$19,956	\$58,176	\$26,143	\$84,319
COMMUNICATION	\$20,683	\$4,538	\$25,221	\$84,317	(\$4,538)	\$79,779	\$105,000	\$0	\$105,000
EVALUATION	\$14,564	\$3,088	\$17,652	\$51,236	\$24,289	\$75,525	\$65,800	\$27,377	\$93,177
OTHER DIRECT COST	\$5,609	\$22,627	\$31,236	\$9,131	(\$22,627)	(\$13,496)	\$17,740	\$0	\$17,740
TOTAL DIRECT COST	\$495,192	\$154,528	\$649,720	\$244,180	\$134,509	\$378,689	\$739,372	\$289,037	\$1,028,409
INDIRECT COST	\$47,166	\$27,506	\$74,672	\$13,462	\$21,630	\$35,092	\$60,628	\$49,136	\$109,764
TOTAL COST	\$542,358	\$182,034	\$724,392	\$257,642	\$156,139	\$413,781	\$800,000	\$338,173	\$1,138,173

12/06/89

## APPENDICES

1. Cover of the Endline Survey-Service Delivery Project Operations Manual (Full Report Available at HKI/New York)
2. Cover of the Implementing Guidelines for Effective Program Management for An Integrated Community-based Delivery System for Prevention and Control of Vitamin A Deficiency in Rural and Urban-Depressed Communities (Full Report Available at HKI/New York)
3. Vitamin A Service Delivery Project 2nd Monitoring Study. Protocol
4. Second Monitoring Study - Antiques Service Delivery Project
5. VAD Form 1 - Monthly VAD Status Report
6. Integrated Services Supervision Checklist
7. Copy of Under Six Clinic Chart (Original Available at HKI/New York)
8. Cover of a Vitamin A Saves Sight and Life Chart (Full Chart Available at HKI/New York)
9. Midterm Evaluation
10. Agenda for Training-Workshop for National VADAG Core Trainers
11. Guidelines on the Treatment of Xerophthalmia from the Philippines Department of Health
12. Guidelines on the Prevention of Vitamin A Deficiency, Xerophthalmis and Nutritional Blindness from the Philippines Department of Health
13. Program for Consultative Meeting on Vitamin A Supplementation, January 20, 1989 (Full Report Available at HKI/New York)
14. Five-Year Directional Plan (1989-1993) for Vitamin A Deficiency Prevention and Control Program in the Philippines
15. Cover of VAD Updates: Quarterly Publication of the Nutrition Service on the Vitamin A Program (Full Copy Available at HKI/New York)

16. Copy of English Dialogue Posterized Comics (Original Available at HKI/New York)
17. Text of an English Translation of a 60 second Radio Spot
18. Cover of the Final Report on a Monitoring Study of the Social Marketing Project for the Prevention and Control of Vitamin A Deficiency in Western Visayas (Full Report Available at HKI/New York)
19. Manoff Consultancy Report from January 30-February 6, 1989
20. Table of Cost Analysis of Printed/Graphic Materials and Radio Expenditures from January - June 1989 for Social Marketing Program
21. Memorandum of Agreement between the Philippines Department of Health and Helen Keller International
22. Project Proposal for Dietary Intake and Consumption of Vitamin A Fortifiable Foods
23. Organization Chart for HKI/Philippines
24. A Case Study of Helen Keller International's Efforts to Influence Vitamin A Programs and Policies in the Philippines



ENDLINE SURVEY - SERVICE DELIVERY PROJECT  
OPERATIONS MANUAL

- I. OVERVIEW OF ENDLINE SURVEY
- II. TRAINING OF SURVEY TEAM
- III. ORGANIZATIONAL SET-UP  
Roles and Responsibilities of Survey Team
- IV. SOCIAL PREPARATION  
Orientation of Health Personnel (Program)
- V. SCHEDULE OF SAMPLE BARANGAYS
- VI. DATA COLLECTION
  - a. Data Collection Survey Flow
  - b. Registration (Specific instructions on how to fill-up masterlist)
  - c. Instructions for Filling-up the Questionnaire Forms
  - d. Specific Instructions in the Conduct of Mother's Interview
  - e. Specific Instructions on Anthropometric measurements
  - f. Specific Instructions on Clinical Assessment  
Case Detection  
Imprint Cytology
- VII. DATA MANAGEMENT (Data Editing and Coding)
  - a. General Editing Instructions
  - b. Specific Instructions in Editing and Coding
    1. Household Data
    2. High Risk Data
    3. Dietary Data
    4. Clinical Data
  - c. Coding Manual
- VIII. SAMPLE SURVEY TOOLS
  1. Master List
  2. Control Card
  3. Clinical Form
  4. Anthropometric Form
  5. Household Interview Schedule
  6. High Risk Interview Schedule
  7. Dietary Interview Schedule
- IX. LIST OF SUPPLIES AND EQUIPMENTS

AN INTEGRATED COMMUNITY-BASED  
DELIVERY SYSTEM FOR PREVENTION AND CONTROL  
OF VITAMIN A DEFICIENCY  
IN RURAL AND URBAN-DEPRESSED COMMUNITIES

ANTIQUE-RURAL  
LAS PIÑAS-URBAN

# **Implementing Guidelines**

**FOR EFFECTIVE  
PROGRAM MANAGEMENT**

**VITAMIN A  
SERVICE DELIVERY PROJECT  
2ND MONITORING STUDY PROTOCOL.**

Antique, Region 6  
Las Pinas, NCR  
Nutrition Service  
Department of Health

PROJECT COMPONENT	CLINICAL COMPONENT (CASE DETECTION/TREATMENT/MANAGEMENT)						NON-CLINICAL COMPONENT (OTHER PROJECT COMPONENT)					
	KNOWLEDGE			SKILLS ACCURACY			INTEGRATION OF PROJECT ACTIVITIES			COMMUNITY INVOLVEMENT	EFFECT OF VAC/ NUTRI-ED	
INDICATORS	MULTIPLE CHOICE TEST			SKILLS TESTING EXERCISE (VALIDATION)			MONITORING	USE OF IEC MATERIALS	COMMUNITY SUPPORT			
DATA COLLECTION METHODOLOGY							OBSERVATION	RECORDS REVIEW	INTERVIEW	INTERVIEW	INTERVIEW	INTERVIEW
TOOLS	FORM 1			FORM 2			FORM 3	FORM 4	FORM 5	FORM 6	FORM 7	FORM 8
TARGET GROUP	RHP	PHN	REM	BHW	TEACHERS	DAY CARE WORKERS	REUs BBS/REMs				LOCAL LEADERS/ OTHER GOs/NGOs	MOTHERS
TARGET SIZE	9	9	20	50	5	5	REUs - 5 BBS - 12				12	60
DATA COLLECTOR/ INTERVIEWER	TEAM C: Norman Mrs. Sta. Maria Dr. Eva Santos <i>Mr. Chit Flaw</i>						TEAM A: Rose Thelma Erlynne 3 hired Interviewers				Team B: Mayen Ellen Aban/Gigi 3 hired Interviewers	

# CLINICAL COMPONENT

ASSESSING THE ACCURACY OF XEROPHTHALMIA  
HIGH RISK CASE DETECTION  
AMONG HEALTH WORKERS  
(CLINICAL COMPONENT)

STUDY PROTOCOL

1.0 RATIONALE

The Department of Health is piloting a project in which Vitamin A supplementation services are integrated into routine health services performed by health personnel and village volunteers. The service delivery model is using a medical and targeted high-risk approach. This model calls for providing high-dose supplements to children with signs and symptoms of xerophthalmia using the WHO-recommended therapeutic schedule. It also calls for providing prophylactic vitamin A supplements to children who suffer from any one of a number of "high-risk" conditions. These conditions include moderate or severe malnutrition, chronic diarrhea, recent measles and acute lower respiratory infections.

The Department of Health, in collaboration with Helen Keller International/Philippines, has trained health workers in case detection, management and treatment in the two pilot project areas (Antique and Las Pinas). Those trained include rural health physicians (RHPs), public health nurses (PHNs), rural health midwives (RHMs), barangay health workers (BHWs), teachers and daycare workers. Each of these workers is expected to conduct case detection among preschoolers. The DOH personnel can treat cases, while the non-DOH personnel are expected to refer cases.

In order to assess the ability of each kind of health worker to conduct case detection, a study is proposed. The results will provide important feedback on how well the skill is mastered by each kind of health worker, whether the expectations of the skill level achievable by each level of health worker is realistic, and on how to improve future trainings or re-trainings.

2.0 OBJECTIVE

To assess and compare the accuracy of xerophthalmia and high-risk case detection among different kinds of health workers (including RHPs, PHNs, RHMs, BHWs, teachers and daycare workers) who underwent VAD training.

### 3.0 METHODOLOGY

#### 3.1 Information to be Collected from Health Workers

- \* Identifying Information: Name, age, position, location and name of area of assignment, no. of years in current position, no. of years of education, name of direct supervisor, location of official station (RHU, BHS, school, day care), upland/lowland.
- \* VAD Training Information: Month of training, duration of training, name of trainers.
- \* Knowledge on Case detection, Treatment and Management.

Variables to be collected are the following:

VARIABLES				
	BBW	REM	PNB	RHP
1. Knowledge of signs and symptoms of VAD (XN, X1B, X2/X3)	x	x	x	x
2. Knowledge of high-risk conditions (2nd/3rd, measles, ARI, diarrhea)	x	x	x	x
3. Knowledge of treatment schedule (age, dose, schedule)	x	x	x	x
4. Knowledge of prevention schedule (age, dose, schedule)	x	x	x	x
5. Knowledge of side-effects	x	x	x	x
6. Knowledge of roles:				
a. integration of detection into health services (OPT USE)	x	x	x	x
b. counselling mothers on side-effects		x	x	x
c. recording VAC receipt on USC card/logbook	x	x	x	x
d. referral of complicated cases	x	x	x	x
e. follow-up after 6 months	x	x	x	x
f. validation of cases	x	x	x	x
7. Knowledge of healthy eye signs				
8. Knowledge of vitamin A-rich foods				
a. counselling mothers on dietary practices	x	x	x	x
9. Knowledge of consequences of VAD	x	x	x	x
10. Knowledge of social preparation	x	x	x	x

3.2 Data Collection

By Whom: Data will be collected by members of the national vitamin A task force consisting of 2 representatives from the Nutrition Service, DOH and 2 representatives of HKI/Philippines. In addition, an ophthalmologic consultant will serve as the "standard" for diagnosis of xerophthalmia against which the diagnosis of other health workers will be compared for accuracy.

Among Whom: RHPs }  
PHNs } Trained in xeroph-  
RHMs } thalmia and high-risk  
BHWs } case detection within  
Teachers & day } the past 14 months.  
care workers }

Sampling Method:  
The sampling method to be used will be systematic random sampling.

FOR ANTIQUE  
Municipalities will be listed from North to south. For each municipality, separate lists of trained RHPs, PHNs, RHMs, teachers and day care workers will be arranged alphabetically. Then one composite list will be made for each category of worker, sequenced by municipality (north to south):

FOR LAS PINAS

Sample Size

	KIND OF TRAINED PERSONNEL	TOTAL TRAINED	% TO BE SAMPLED	NO. IN SAMPLE	SAMPLING INTERVAL
1. ANTIQUE	IRHPs	18	50%	9	2
	IPHNs	18	50%	9	2
	IRHMs	105	20%	20	5
	IBHws	500	10%	50	10
	Teachers	90	5%	5	20
	Day Care Workers	90	5%	5	20
		823	12%	98	
2. LAS PINAS	IRHP	11 / 12			
	IPHN	15 / 15			
	IRHM	17 / 11	100%		
	IBNS	21 / 22 / 14			
	Mother Leaders	36			

HOW

3 | 86 | 2.7

1. Administration of multiple choice test on xerophthalmia and high-risk case detection and treatment.
2. Skills testing exercise  
Health personnel will be asked to examine thirty children who will be prescreened and identified as either xerophthalmic, high-risk or normal. Pre-screening will be conducted by an ophthalmologist and/or trained physician. Each child will be tagged with a number which will correspond to a record sheet or which the health personnel will record his/her diagnosis and recommended treatment.

WHERE

1. Administration of test will occur at either the district hospital or RHU.
2. Case detection will be conducted in a preselected barangay.
3. Three groups/location will be used in Antique North, Central, South.

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5. Instructions on what to do at the Field/Site (Clinical Component)

5.1 Guidelines on how to conduct the multiple choice test

1. One team member (\_\_\_\_\_) will conduct the multiple choice test among the target personnel assisted by (\_\_\_\_\_).
2. Assemble all target personnel identified/sampled in a convenient place. Preferably in a room distant from the assembly of PS to avoid unnecessary interruption.
3. Get the masterlist of target personnel who will take the test and check the attendance.
4. Explain the purpose or objective of the monitoring activity specifically the conduct of the list and validation of case detection.
5. Distribute (Form 1) multiple choice test form/Post-training Exercise Questionnaire.
6. Give the instruction to the target personnel on how to accomplish the test.
  - \* Background Information/ID Number
  - \* Multiple choice test
7. Allocate sufficient time for the health personnel to accomplish the test.
8. Be sure all target personnel are provided with pens/pencils.
9. Politely discourage talking/consulting among the target personnel while taking the test.
10. After the health staff has accomplished the test, collect the questionnaires and record in the masterlist that it has been submitted.
11. Count the accomplished questionnaire and check with the number of questionnaire distributed earlier.
12. Classify the accomplished test questionnaires by the designation or position of the target personnel (RHP, PHN, RHM, BHW, Teacher, Day Care Worker) and put it in the appropriate/labeled envelopes.
13. After all accomplished questionnaires have been recorded another team member (\_\_\_\_\_) will give the instruction on how to accomplish (Form 2) validation on case detection form. Distribute Form 2.

14. The target personnel are then requested to proceed to the site where the pre-numbered PS are assembled.

Materials Needed:

- a. Form 1
- b. Pens/Pencils
- c. Fental Pen
- d. Folders
- e. Envelopes
- f. Master list of target personnel by site

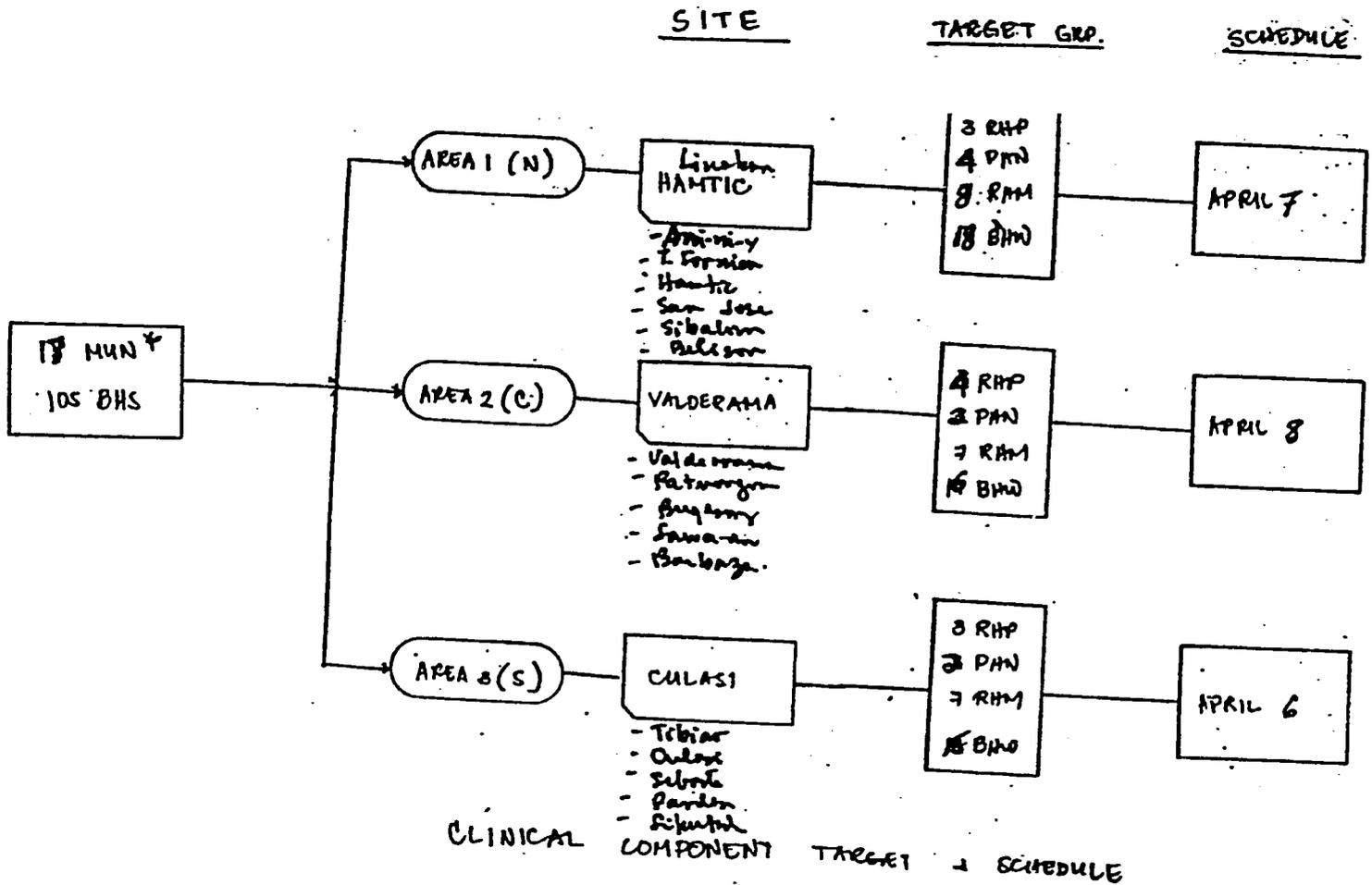
5.2 Guidelines on how to conduct the Validation on Case Detection

1. While the multiple choice test is being conducted, orient/brief the mothers of the PS assembled on the objective of the activity. The orientation will be done by (\_\_\_\_\_).
2. The Preschoolers assembled will be given their ID numbers, a team member will be assigned to pin the ID number of the child. The child should be 12-83 months old. (\_\_\_\_\_)
3. Prepare the Master list of the pre-schoolers to be examined. (ID Number, Name of child, Residence--Municipality and Barangay, Age of Child)
4. Once the child is listed in the masterlist and given an ID number, the child is ready for examination.
5. Dr. Eva Santos will examine each child (30 PS) for eye signs (XN, X1B, X2, X3) and record her findings in her masterlist.
6. (\_\_\_\_\_) will examine 15 PS each for High-Risk conditions (PEM, Measles, ARI, & Diarrhea) with the assistance of a midwife not included as target/sample. The findings is then recorded in the masterlist of the PS.
7. After all the (30) PS have been examined for eye signs and HR conditions (by Dr. Santos, \_\_\_\_\_), group the PS into 3 groups (10 per group/children nos. 1-10-, 11-20, 21-30). They are then ready for examination of the target personnel.
8. The target personnel will be asked to examine all 30 PS for eye signs and HR conditions. Record the findings using the record sheet (Form 2). The target personnel may examine the 30 PS in any order they prefer.

9. The Facilitators should check the target personnel has completed her/his examination to all 30 PS.
10. Completed/accomplished record sheets (Form 2) should be submitted to (\_\_\_\_\_). Review/check if the submitted Form 2 of the target personnel has completed the examination. Record the submitted Form 2 in the masterlist.

**Materials Needed:**

- a. Form 2
- b. ID Number [1-30]
- c. Pens/pencils
- d. Pentel Pen
- e. Folders
- f. Envelopes
- g. Flashlights
- h. Weighing scales
- i. Weight for age table



- RHP - 10
- PHN - 8
- RHM - 22
- BHW - 49
- Tamb - 6
- Dsw - 6

Caluya - not included.

# NON-CLINICAL COMPONENT

**ASSESSMENT ON THE INTEGRATION OF VITAMIN A  
ACTIVITIES/COMPONENTS INTO THE EXISTING  
HEALTH DELIVERY SYSTEM  
(NON-CLINICAL COMPONENT)**

**STUDY PROTOCOL**

**1.0 RATIONALE**

Major design features of the vitamin A supplementation program includes:

- a) the integration of xerophthalmia and high-risk detection and treatment into existing health services
- b) the emphasis on nutrition education and counselling for prevention of vitamin A deficiency
- c) the conduct of side-effects counselling to inform mothers of the risks and benefits of vitamin A supplementation, and necessary action in the event of side-effects
- d) involvement of the community i.e. NGOs and other GOs in the implementation of Vitamin A program

To determine the degree to which these features have been implemented as part of the vitamin A supplementation/service delivery programs in Antique and Las Pinas, the conduct of observational visit and record reviews and interviews to selected individuals and others is deemed necessary.

**2.0 OBJECTIVES**

- 2.1 to assess how well xerophthalmia and high risk case detection and treatment have been integrated into on-going health services/activities
- 2.2 to determine the degree to which nutrition counselling is integrated into supplementation services
- 2.3 to determine if side-effect counselling is being conducted
- 2.4 to determine the degree or level of community support linkage established by the health program

### 3.0 METHODOLOGY

#### 3.1 Data Collection

##### What?

- \* Integration of Vitamin A activities into the existing health delivery system
- \* VAD activities conducted as part of OPT, USC, TFAP and EPI
- \* Nutrition counselling conducted as part of supplementation
- \* Method of VAC storage
- \* Records (clinic and family based) used to record receipt
- \* Side-effect counselling
- \* OPT records
- \* USC records
- \* Monthly VA Report Forms
- \* Availability and use of IEC materials
- \* Community involvement

##### For the Health Personnel

- \* Establishment of CS linkages and conduct of social preparation activities
- \* Action Plans on VAD Project

##### For the NGOs and Other GOs

- \* Knowledge of the health worker in the community
- \* Knowledge of health activities in the community
- \* Awareness of the Vitamin A Program
- \* Extent of awareness/knowledge about the Vitamin A Program
- \* Involvement of the community

##### Effect of VAC and Nutrition Education

- \* For Mothers.
  - Case detection, Treatment and Management
  - Effect of VAC
  - Dietary Counselling by BHW/RHM
  - Recall of Message from Radio

##### By Whom?

- \* Outside observers to be contracted
- \* National/Regional/Provincial VAS Task Force

##### Among Whom?

- \* RHUs
- \* BHS

##### Sampling Method

- \* Purposive Sampling for observation of OPT
- \* Systematic Random Sampling for record review and USC clinic observation

**Sample Size:**

	UNIT	TOTAL #	% TO BE SAMPLED	# IN SAMPLE
ANTIQUÉ	RHUs	18		5 → 7
	BHs	107	10%	12 → 13
	OPT	purposive		?
	EPI	purposive		?

**How:**

**1. Observation Visit:**

OPT  
USC  
TFAP

EPI  
VAC STORAGE & SUPPLY  
RHU/BHS

**2. Record Review:**

OPT  
VA Logbook  
USC log  
USC card

**3. Interview:**

RHMs  
Local leaders/NGOs/Other GOs  
Mothers

GUIDELINES IN THE CONDUCT OF MONITORING STUDY  
FOR (NON-CLINICAL COMPONENT)

1. Suggested Team Composition:

Team A and B will compose of the following members:

	<u>TEAM A</u>	<u>TEAM B</u>
Team Leader	Rose	Mayen
Members	Thelma Erlynn 3 hired interviewers	Ellen 3 hired Interviewers NIOA AMEN

2. Schedule of Activities/Data Collection

Schedule of interview/assignments of each team member should be prepared by the team leader. (Use Schedule of activities matrix)

3. At the RHU/BHS

3.1 Upon arrival of the team at the RHU/BHS--locate/identify the health personnel sampled.

3.2 The team leader should do the following:

- a. Introduce the team members.
- b. Inform the health personnel the purpose of the visit and activities/interviews to be conducted.
- c. Select 5 households from the VA logbook who were given VAC within the past two months. If possible, at least one should be a household where a child was given the full 3 dose treatment for xerophthalmia. The others can be high-risk cases.
- d. Instruct the team members assigned to interview mothers to locate the households/mothers selected.
- e. Review accomplished form and discuss with team members problem encountered.

3.3 Other team members may start to conduct the activity assigned to them such as:

- a. records review
- b. observation
- c. interview of the health personnel
- d. interview of other local leaders/NGOs

VITAMIN A SERVICE DELIVERY PROJECT  
DEPARTMENT OF HEALTH  
Checklist of Vitamin A IEC Materials & Other Supplies  
2nd Monitoring Study

Name of Respondent: \_\_\_\_\_  
Designation: \_\_\_\_\_  
Municipality/District: \_\_\_\_\_  
Barangay: \_\_\_\_\_  
Interviewer: \_\_\_\_\_  
Date of Interview: \_\_\_\_\_

- =====
1. What IEC materials do you have? (Please check)
- |                           |       |                            |       |
|---------------------------|-------|----------------------------|-------|
| a. VADAG Manual           | _____ | f. Implementing guidelines | _____ |
| b. Yellow Primer          | _____ | g. Love your Child Poster  | _____ |
| c. <del>Blue Primer</del> | _____ | h. Vitamin A Stickers      | _____ |
| d. Slide Ruler            | _____ | i. Vitamin A Flyers        | _____ |
| e. VAD Clinical Poster    | _____ |                            | _____ |

2. What IEC materials was most useful to you?  
\_\_\_\_\_  
\_\_\_\_\_

3. How did you find it?  
\_\_\_\_\_  
\_\_\_\_\_

4. How often do you use it?  
\_\_\_\_\_  
\_\_\_\_\_

5. What IEC materials have you not used/prefer and why?  
\_\_\_\_\_  
\_\_\_\_\_

6. What other IEC materials would you want to have and why?  
\_\_\_\_\_  
\_\_\_\_\_

VITAMIN A SERVICE DELIVERY PROJECT  
DEPARTMENT OF HEALTH  
Interview Schedule for Health Personnel  
2nd Monitoring Study

Name of Respondent: \_\_\_\_\_ Interviewer: \_\_\_\_\_  
Designation: \_\_\_\_\_ Date of Interview: \_\_\_\_\_  
Municipality/District: \_\_\_\_\_  
Barangay: \_\_\_\_\_

=====

A. Establish CS linkages/social preparation

1. What are the existing GOs and NGOs in your community?  
\_\_\_\_\_  
\_\_\_\_\_
2. How did you come to know these GOs and NGOs?  
\_\_\_\_\_  
\_\_\_\_\_
3. Have you ever worked with them?  
1 - YES                      2 - NO
4. How did you work with them?  
\_\_\_\_\_  
\_\_\_\_\_
5. What was the nature of your work?  
\_\_\_\_\_  
\_\_\_\_\_
6. When was this held/conducted? \_\_\_\_\_
7. Where was this conducted? \_\_\_\_\_
8. Have you met the Barangay Captain/Mayor about the program?  
1 - YES                      2 - NO
9. Anybody else you approached about the program?  
\_\_\_\_\_  
\_\_\_\_\_
10. What was their reception/why do you think so?  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





13. When and how did you hear about the program?

1 - Meetings \_\_\_\_\_

2 - Radio \_\_\_\_\_

3 - Outreach activity \_\_\_\_\_

4 - Others \_\_\_\_\_

=====  
D. Extent of awareness/knowledge about the Vitamin A Program

14. If you have heard about the Vitamin A Program, can you tell us what is it all about? \_\_\_\_\_  
\_\_\_\_\_

15. What do you think will happen if there is Vitamin A Deficiency? \_\_\_\_\_  
\_\_\_\_\_

16. Who do you think will most likely suffer from Vitamin A deficiency? Who else? \_\_\_\_\_  
\_\_\_\_\_

17. What do you think should be done to prevent Vitamin A deficiency? What else? \_\_\_\_\_  
\_\_\_\_\_

18. What is currently being done? \_\_\_\_\_  
\_\_\_\_\_

=====  
E. Involvement of the community

19. You are the \_\_\_\_\_ in your community, do you have planned activities to help in the health and nutrition program? 1 - YES 2 - NO

20. If yes, what are these? Anything else? \_\_\_\_\_  
\_\_\_\_\_

21. If none, why? \_\_\_\_\_  
\_\_\_\_\_

22. Have you discussed this with your members?  
1 - YES 2 - NO

23. Have you discussed this with your health personnel?  
1 - YES 2 - NO

24. If yes, how do you intend to implement this?  
\_\_\_\_\_  
\_\_\_\_\_

FORM 8

VITAMIN A - SERVICE DELIVERY PROJECT  
DEPARTMENT OF HEALTH  
INTERVIEW SCHEDULE FOR MOTHERS  
2nd Monitoring Study

*to be completed*

Barangay : \_\_\_\_\_  
BBS : \_\_\_\_\_  
Municipality/District : \_\_\_\_\_  
Midwife : \_\_\_\_\_  
  
Name of Mother : \_\_\_\_\_  
Name of Child : \_\_\_\_\_  
Age : \_\_\_\_\_  
Condition of Child : \_\_\_\_\_  
for which VAC was given : \_\_\_\_\_  
Date VAC was given : \_\_\_\_\_

*at BBS*

A. Case Detection, Treatment & Management

1. Was your child \_\_\_\_\_ sick for the past 2 months?  
1 - YES      2 - NO
2. If yes, what was his/her sickness? \_\_\_\_\_
3. Did you bring your child to the health center?  
1 - YES      2 - NO
4. Who examined your child? Who else?  
1 - RHP      3 - RHM      5 - Others: \_\_\_\_\_  
2 - PHN      4 - BHW
5. What was her/his findings? \_\_\_\_\_
6. What treatment was given to your child? \_\_\_\_\_
7. Have you seen this? (Show VAC)  
1 - YES      2 - NO
8. Do you know what it is? What? \_\_\_\_\_  
1 - YES      2 - NO
9. Who told you? \_\_\_\_\_
10. Was your child ever been given VAC?  
1 - YES      2 - NO

VAC *Identified by the mother*

*the doctor in the*

*eye examination done at OPD / USC / EP / EOD*

*Further given → recorded in USC: Yes or No*

*if plain why? Yes or No.*

*Annex*

*See effects with given → Yes → infection with N done given*

*Sp*

11. Why was your child given VAC? \_\_\_\_\_

12. How many were given to your child? \_\_\_\_\_

13. When was the VAC given? 14. Who gave the VAC?  
1st dose \_\_\_\_\_  
2nd dose \_\_\_\_\_  
3rd dose \_\_\_\_\_

15. Do you have USC Card? (Can I see it?)  
1 - YES 2 - NO

16. If USC Card is available, check/see if the VAC given was recorded?  
1 - YES 2 - NO

17. Will you have to go back for another VAC?  
1 - YES 2 - NO

18. When? \_\_\_\_\_

19. Who told you? \_\_\_\_\_

B. Effect of VAC — *perception of mother*

20. Were you told what effects the VAC would have on your child?  
1 - YES 2 - NO

21. Who told you? \_\_\_\_\_

22. What was told to you?

23. What did you observe in your child after taking VAC?  
Anything else?

24. How did you notice the \_\_\_\_\_?

POSITIVE EFFECTS	22	23	24	NEGATIVE EFFECTS	22	23	24
1. Will be able to see at night.				1. Headache			
2. Will begin playing at night.				2. Vomiting			
3. Will no longer stumble on furniture at night.				3. Diarrhea			
4. Disappearance of soap-sud like material on white part of eye				4. Nausea			
5. OTHERS:				5. Fever			
				OTHERS:			

(If negative effects were observed, ask Q. 25-28.)

25. When did you observe or notice the \_\_\_\_\_?

- ① see paper
- ② Admin given / delivery
- ③ perception of mother
- ④

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26. When you observe the effect, what did you do about it?

\_\_\_\_\_  
\_\_\_\_\_

27. How did you know of what to do? \_\_\_\_\_

\_\_\_\_\_

28. Did somebody advise you in case of such reaction/ observation? 1 - YES 2 - NO

29. Who told you? \_\_\_\_\_

30. If the health worker said your child needed another VAC, would you give it to her/him? 1 - YES 2 - NO

31. Why? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

=====  
C. Dietary Counselling by BHW/RHM

32. Have you received any advice or message from the BHW/RHM in the last 3 months? 1 - YES 2 - NO

33. Who gave you the advice? 1 - BHW 2 - RHM 3 - Both 4 - Others

34. What was the advice given? Anything else?

\_\_\_\_\_  
\_\_\_\_\_

35. Where was the advice given? \_\_\_\_\_

36. Were you given the advice alone or with other mothers? MC

37. What did you think of the advice given to you? Did you believe it? Did you follow it? Why/why not?

\_\_\_\_\_  
\_\_\_\_\_

38. While giving you the advice, did the BHW/RHM use any poster? 1 - YES 2 - NO

Daily. Candy. MC

had a gi. - for gi.



SECOND MONITORING STUDY  
ANTIQUES SERVICE DELIVERY PROJECT

EXECUTIVE SUMMARY

BACKGROUND

Since 1987, the Department of Health (DOH), in collaboration with Helen Keller International has piloted a service delivery project in Antique which integrates vitamin A services into routine health services. The vitamin A services include case detection and treatment of children with xerophthalmia and high-risk conditions, providing nutrition education and dietary counselling to mothers, and linking with community organizations to mobilize broad-based support and awareness.

RATIONALE

Monitoring is an essential component to all projects. It enables program planners and implementors to measure progress, identify areas for improvement, and make strategic decisions. This monitoring study was conducted to provide feedback on the quality and extent of project implementation, particularly in the areas of case detection of xerophthalmia and high-risk conditions among preschoolers, integration of vitamin A services into OPT, USC, TFAP, etc.; community perception of vitamin A supplementation; use of IEC materials and the provision of dietary counselling; and establishing community linkages.

METHODOLOGY

The study was divided into two parts: a clinical component and a non-clinical component. The clinical component was conducted using a multiple-choice test to assess the knowledge level of health workers, and actual case examination of preschoolers in a community. A sample of health workers was randomly selected from a list of trained personnel. In all 6 RHPs, 4 PHNs, 19 RHM, 34 BHWs and 2 teachers were included in the sample. In addition to the administration of a standard multiple-choice test, the health workers were divided into three groups and conducted case detection among a group of 30 preschoolers. The actual diagnosis of each health worker was compared with the diagnosis of an ophthalmologist to grade diagnostic accuracy.

The non-clinical component of the study was conducted using a combination of in-depth interviews, clinic observations and review of records. Interviews were conducted among a sample of RHM (16), PHNs (3), Mothers (71) and community leaders (23). Observations and review of records were conducted in 7 RHUs and 14 BHS selected to include upland, lowland and coastal areas. Data were collected on vitamin A services, VAS storage, record keeping, community linkages, dietary and side-effect counselling and community perceptions of supplementation.

## FINDINGS

### CLINICAL COMPONENT:

#### KNOWLEDGE of V/D

- sufficient knowledge (85%) in case detection, high risk conditions, among RHPs, PHNs and RHMs.
- BHW knowledge levels acceptable but need improvement in the following areas:
  - treatment schedule
  - side-effects counselling
- areas for improvement for RHPs, PHNs and RHMs include side-effects counselling dietary counselling (frequency, quality of GLVs), and specifics of treatment and prophylaxis schedule.

### SKILLS IN CASE DETECTION:

#### Eye Signs:

- 80% of the XN cases were accurately diagnosed by all level of health workers except the BHW (70%).
- 25% of health workers exhibited uncertainty in diagnosing some of the XN cases.
- 80-90% of health workers, upon seeing a normal eye, know it has no Bitot's spots.
- only one (1) case of XIB identified among 90 children examined (in Valderrama). only two (2) health workers, a RHM and a BHW, positively identified the condition (out of 2 RHPs, 2 PHNs, 7 RHMs and 12 BHWs).
- 85-90% of health workers, upon seeing a normal eye, know there is no corneal scar.
- only 2 cases of corneal scars were identified among the 90 children (also in Valderrama). These were identified by 1 (out of 2) PHNs and 5 (out of 7) RHMs, and about 3 BHWs (out of 12). No RHP diagnosed the XS.

### HIGH-RISK CONDITIONS

- 30-40% of the children 2nd or 3rd degree malnourished were not identified correctly by the RHM and BHW based on their use of the computation of nutritional status by age in months.
- Only 1 measles identified. 100% of RHPs and PHNs identified case correctly. Only 70% of RHMs identified case.
- Low diagnostic accuracy for chronic diarrhea (27-57%) and ARI (48-62%) among all levels of health personnel. This may be due to high variability of the bases of diagnosis of ARI and chronic diarrhea, as well as lack of clear definition on what constitutes the same conditions as HR for V/D.
- Among non-diarrhea cases, health workers quite sure in the diagnosis (84-96%).
- Among non-ARI cases, only physicians have high degree of certainty (97%) that condition is not ARI. Other workers exhibit lower level of certainty: PHN-66%,

NON-CLINICAL COMPONENT:

1.0 Case Detection, Treatment and Management

1.1 Case Detection

- 60% & 17% of mothers reported that case detection among their children was performed during OFT and consultation respectively.
- Most case detection (75%) is performed by RHMs, followed by RHPs (14%). DHWs performed less than 6% of case detection.
- During clinic observations, only 1 in 19(4) health workers asked about XN to mothers of children with high-risk conditions & only 2 of 19(12) routinely examined preschoolers' eyes for xerophthalmia.

1.2 Treatment

- Review of records & validation of household indicated that over 90% of children given supplementation was given the appropriate dose according to schedule. This finding conform with clinic observation findings.
- Over 80% of mothers whose children had been given a VAC recognized the VAC, but only 50% of these mothers were informed about the purpose of the Vitamin A supplementation.

1.3 Side-Effects Counselling

- Less than half (47%) were given any information on the possible side-effects and less than (25%) were given any advice on what action to take in case of side-effects.

1.4 Recording and Supply & Storage of VAC

- Less than 20% of preschoolers had VAC receipt recorded on their USC card.
- 90% of clinics observed had vitamin A supplements present, but only 70% had a supply sufficient to meet target populations need. In two BHS, VAC are not stored but given upon request by the RHU.
- Over 80% of clinics were observed to store VAC properly including dark bottle, proper labels, expiration date & safe storage, although one clinic did not have dosage indicated on VAC container. One RHU stored the VAC in a table drawer which could be reached by anyone.
- In addition to the 200,000IU capsule, multiple preparations of vitamin A present in about 80% of centers. These include retinol palmitate (15,000IU/ml), Prisma V: capsule (20,000IU), retinol palmitate capsule (25,000IU), & a 50,000 vitamin capsule. These preparations are given to target groups not targeted by the service delivery projects.

1.5 Dietary Counselling & Advice on Follow-up Dose

- Only half of the mothers of children given a VAC were given dietary advice on how to prevent the recurrence of V/D.
- Only half of the mothers of children given a VAC were told that their children should come for follow-up after six months.

## 2.0 Community Response to Vitamin A Supplementation

- Over 60% of the mothers whose children had given a VAV reported a positive response (eg increased appetite, increased energy, improved night vision), another 30% reported no observable effect, and about 7% reported a combination of positive & negative effects.
- \*\* All mothers indicated their willingness to bring their children for another VAC when needed.

## 3.0 Nutrition Education

### 3.1 Availability of IEC Materials (at clinics)

- More than 70% of the clinics had the V/D/G manual, V/D primer (yellow), clinical detection poster, implementing guidelines, Love Your Child Poster & the slide ruler present.
- Least available at the clinics were vitamin A stickers (42%), vitamin A flyers (37%) and the blue project primer (52%).

### 3.2 Usefulness of IEC Materials (according to health personnel)

- Most useful to health personnel were the Love Your Child Poster (79%) (since the information is complete & easy to explain, attractive and eye-catching) & the clinical detection poster (53%).
- Least useful, according to health personnel, were the stickers because it provide little information.
- Development of komiks & leaflet on vitamin A rich food for mother recommended as well as flip charts for health workers for use in mothers classes.

### 3.3 Recall of Nutrition Education (by Mothers)

- About 60% of mothers interviewed had attended a mothers class most of which were conducted by RHMs (76%).
  - Mothers' exposure to Vitamin A IEC materials was relatively low: Love Your Child Poster (38%), Flyers (4%), Stickers (7%), Clinical Detection Poster (40%).
  - Most mothers (87%) claim to have heard some forms of nutrition education message, mostly from RHMs (72%) and BHWs (12%).
- Most mothers (87%) had heard messages on blindness prevention disseminated by the health staff (53%), radio (36%) or other sources.
- Almost all mothers (94%) had heard advice on feeding GLVS either from the health staff (45%), the radio (42%) or both.

## 4.0 Community Support/Linkage

### 4.1 Knowledge of Health Workers by Community:

- Most community leaders (95-100%) knew the midwife in the community and had been approached (75-100%) by the midwife.

#### 4.2 Knowledge of Health & Nutrition Activities in the Community

- \* Few of the community leaders (22%) could identify 3 or more health/nutrition activities being undertaken in this barangays. Most common mentioned activities included milk feeding, weighing and immunizations
- \* Most community leaders (73%) were involved in assisting one or more health/nutrition activities by serving as resource persons during info campaigns, organizing community assemblies, gathering mothers for OPT or assisting in actual feeding of children.

#### 4.3 Awareness of Vitamin A Program among Community Leaders

- \* All leaders (100%) had heard of the Vit. A program either from the midwife (65%), physician (8%), radio (35%) or community meetings (30%)
- \* Leaders exhibited low knowledge about what the Vit. A program was about. Few mentioned that the V/D program involved Vit. A supplementation (26%), aimed to prevent blindness (17%), provide information about Vit. A rich foods (13%).
- \* Less than half (48%) knew about the consequences of V/D, namely child can become blind (48%), suffer from night blindness (39%) or lowered resistance to disease (4%). Most, however, knew that preschoolers are most prone to V/D.
- \* While most community leaders (65%) knew educating mothers to feed GLVs to their children could prevent V/D, very few knew what is currently being done to prevent V/D in their communities, feeding of children (13%), food production/vegetables gardening (17%), supplementation (22%), nutrition education (26%).

#### 4.4 Community Involvement

- \* Almost all (92%) of the community leaders said they have plans to implement activities related to V/D prevention including putting up community gardens (29%), build multi-purpose center (19%) & continue the feeding actvs. (19%). Only planned activities were mentioned. There was little evidence that activities had already been conducted.

#### 4.5 Health Worker knowledge of & Linkage with Community Organizations

- \* Most health workers (60%) can identify at least 3 GOs and NGOs in their community, which they learned about through meetings, mothers class, home visits and community assemblies. Most health workers (95%) have workers, in one form or another, with at least one of these organizations.
- \* Most health workers (95%) reported having met with the barangay captain or other community leaders to discuss the V/D program and having received a positive response for cooperation.
- \* 70% of the health workers said they received referrals of VAD cases by outside agencies including teachers (41%), day care workers (30%), concerned mothers (12%) and barangay officials (12%). Most cases referrals either malnutrition, night blindness or measles.
- \* Most health workers (60%) have made action plans for involving the community in Vit. A activities, during their Vit. A training, but of these, only 50% have started implementation of the plans.

- Most site time, logistic (transportation) and community attitudes as constraints in implementing action plans.

#### CONCLUSIONS AND RECOMMENDATIONS:

##### A. TRAINING

1. Health Worker knowledge and skills need improvement in the following areas.
  - **integrating case detection in routine services like GPT, consultation, and USC,**
  - recording of V/C receipt on USC cards.
  - advising mothers of possible sideeffects and appropriate actions to take
  - counselling mothers of children given V/C on purpose of V/C, dietary advice to prevent V/D, and follow-up dose
  - strengthening nutrition education possibly through FL/NE.
2. Case detection skills for XM and XLI are still questionable although knowledge of signs/symptoms is high. Actual case presentation during staff meetings is recommended.
3. Confusion regarding what diarrheas and ARIs constitute high-risk condition for V/D. Recommend the issuance of clear and practical definitions of diarrhea (e.g amoebiasis) and ARIs (e.g. acute bronchitis, primary complex, etc.) for physicians and simple definitions for RHMs and BHWs.

##### B. LOGISTICS:

1. Requisition and supply system of V/C needs improvement since 30% of clinics surveyed have inadequate supply for target population.
2. Many 2nd degree malnourished children are being missed. Improved targetting and coverage, particularly of the malnourished children, is recommended.
3. Hard to reach areas are not being covered, and teachers and BHWs are not being fully tapped. Special emphasis should be given to utilizing teachers and BHWs trained in V/D in those difficult areas.
4. Inadequate IEC materials for mothers. Provide komiks or leaflets on GLV sources for mothers.

##### C. MANAGEMENT SUPPORT:

1. The fact that many of the problems identified in this study were not acted upon earlier, indicate weak monitoring at all levels particularly in the area of skill deficiencies, V/C supply and targetting of children. Regular & systematic monitoring at the regional, provincial and municipal levels needs strengthening. The provincial V/D task force should act as replenishing V/C supply, serving as resource persons for skills validation and training of health workers in nutrition education.

##### D. COMMUNITY SUPPORT:

1. While awareness of the Vit. A program is high among community leaders, very few know what the activities of the program are. There is a need to reorient leaders in a more specific way.
2. Many health workers have action plans but few have started implementation. There is a need for RHPs, & PHNs to assist the RHMs with initiating action plan implementation. Also, there is a need to tap the rich source of NGOs to help assist health workers with community organization skills.

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3. Teachers and day care workers have been sources of case referrals. This tie-up should be strengthened and intensified, not only for case detection but also for nutrition education and school or home gardening.
4. The provincial task force had plans to develop a model barangay per municipality. This idea should be revitalized and tried on a small-scale so that effective methods of generating community support in combatting V/D can be developed and shared.

---

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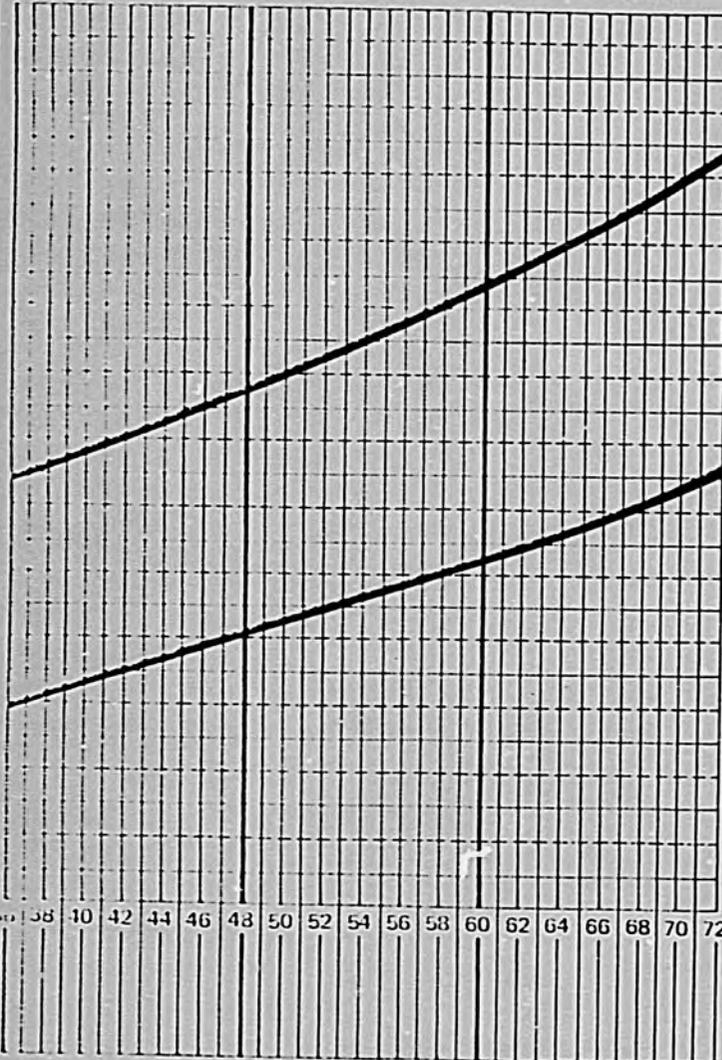
**INTEGRATED SERVICES SUPERVISION CHECKLIST**

Accomplished By: \_\_\_\_\_  
 Designation : \_\_\_\_\_  
 Date Accomplished: \_\_\_\_\_

PROGRAMS/INDICATORS	YES	NO	REMARKS
<b>I. OPERATION TIMBANG</b>			
1. Is a masterlist of PSC available?			
2. Functional weighing scale available?			
3. Submitted OPT results to Provincial/District/Rural Health Unit?			
4. Presence of consolidated OPT chart posted?			
5. OPT results submitted to Provincial District/Rural Health Unit?			
6. OPT results presented at staff mtg?			
<b>II. U S C</b>			
1. Is a masterlist of registrants available?			
2. USC cards available?			
3. Is dietary counselling conducted?			
4. USC reports submitted?			
5. USC status presented at staff mtg?			
<b>III. TARGETTED FOOD ASSISTANCE PROJECT</b>			
1. Masterlist of beneficiaries available?			
2. Identified beneficiaries given food commodities?			
3. Is there actual feeding conducted?			
4. Food commodities available on hand?			
5. Mothercraft classes organized?			
6. Reports submitted to Provincial/District/Rural Health Unit?			
7. Progress report presented at staff meeting?			
<b>IV. VITAMIN A</b>			
1. Is masterlist of cases and high risk available?			
2. Cases and high risk given VAC?			
3. Is VAC available?			
4. Are report forms available?			
5. VAD, IEC Materials available?			
6. Nut. Educ. activities conducted?			
7. VAD community assemblies/activities conducted?			
8. VAD reports submitted?			

PROGRAMS/INDICATORS	YES	NO	REMARKS
<b>V. IRON SUPPLEMENTATION</b>			
1. Is masterlist of anemia available?			
2. Identified of cases treated?			
3. Iron supplements available?			
4. Iron supplements adequate?			
5. Nutri. Ed. activities conducted?			
6. HIS report forms submitted?			
<b>VI. IDD</b>			
1. Is masterlist of goiter cases available?			
2. Identified cases treated?			
3. Iodized salt/iodine tablet/lipidol available?			
4. Nutri. Ed. activities conducted?			
5. HIS form submitted?			
<b>VII. EPI</b>			
1. Is masterlist of 0-12 months available?			
2. Immunization going-on?			
3. Are vaccines available?			
4. Functional cold chain available?			
5. Monthly EPI education activities conducted?			
<b>VIII. CDD</b>			
1. List of CDD cases during past month?			
2. Oresol and VAC given to CDD cases?			
3. Oresol available?			
<b>IX. MALWARD</b>			
1. Third degree children admitted in malward?			
2. Third degree admitted are rehabilitated?			
3. Medicines/Food available?			
4. Mother's class and cooking demo conducted?			

3-4 TAON      4-5 TAON      5-6 TAON



**UNDER SIX CLINIC**  
**SUBAYBAY SA PAG-ALAGA**  
**KAGAWARAN NG KALUSUGAN**

KLINIK		NUMERO NG BATA
BARANGAY		
NUMERO NG PAMILYA		
NGALAN NG BATA		
LALAKE/BABAE		
NGALAN NG INA		
PAG-AARAL NA TINAPOS		
TRABAHO		
NGALAN NG AMA		
PAG-AARAL NA TINAPOS		
TRABAHO		
Petsa	Kapanganakan/Timbang	
	Saan ipinanganak	
Tirahan ng Pamilya		
Kalagayan ng Pamumuhay		
MGA KAPATID		
TAONG IPINANGANAK	LALAKE/BABAE	KALUSUGAN

**PETSA NG IMUNISASYON**

	1	2	3
B.C.G.			
D.P.T.			
POLIO			
MEASLES			

**GABAY SA WASTONG PAGKAIN**

PASUSUHIN ANG IYONG ANAK HANGGANG 2 TAON. SIMULA SA GULANG NA 4-6 BUWAN, UNTI-UNTING BIGYAN NG KARAGDAGANG PAGKAIN:

- 4-6 buwan – lugaw, niligis na kamote o patatas
- 4 1/2 buwan – mga prutas gaya ng saging, abokado, papaya, tiesa
- 5 buwan – mga gulay gaya ng kalabasa, upo, karot, talbos ng kamote o kangkong.
- 6 buwan – mga protina gaya ng munggo, isda, mani, pula ng itlog, karne.
- 7 buwan – isang taon: ANG BATA AY DAPAT NG KUMAIN NG LAHAT NG URI NG PAGKAIN.

**GAMOT SA PAGTATAE**

**TUNAWIN:**



Isang paketeng ORESOL



+ 1 litro ng inuming tubig



o kaya 5 baso ng inuming tubig

**MAGTIMPLA:**



1 kutsaritang asukal



+ 1/5 kutsaritang asin



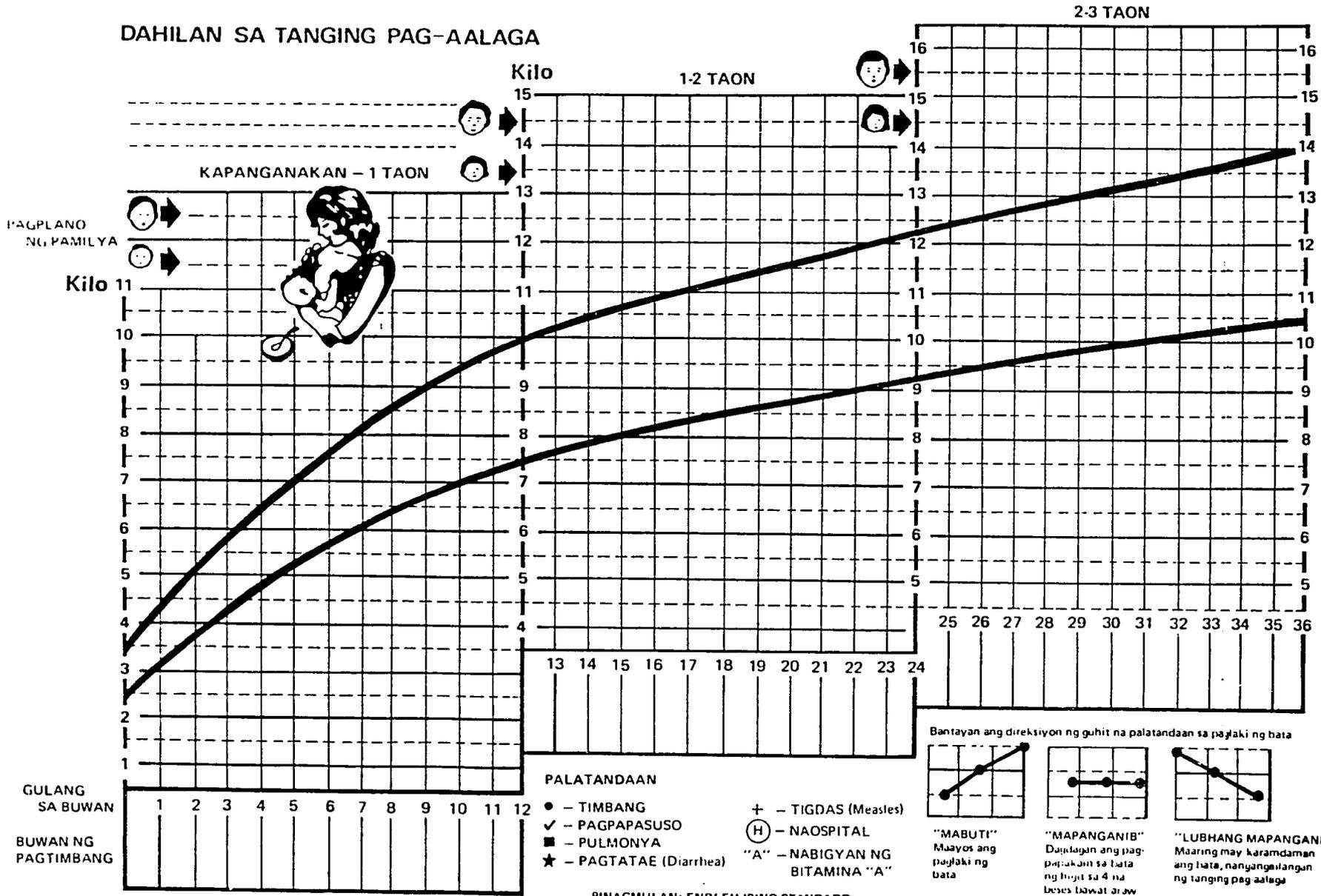
+ isang basong inuming tubig

**IBIGAY:** Sa bawat pagdumi - isang baso kung 4-6 na taon o higit pa  
 1/2 baso kung 0-3 na taon

HUWAG GAMITIN ANG SOLUSYON PAGKARAAN NG 24 ORAS

13

# DAHILAN SA TANGING PAG-AALAGA



PINAGMULAN: FNRI FILIPINO STANDARD

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# Vitamin A Saves Sight and Life



You can prevent this blindness!



RECEIVED  
DEC 21 1988  
BLINDNESS PREVENTION DIVISION

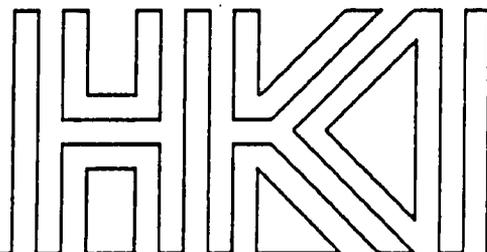
Midterm Evaluation  
November, 1988

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Helen Keller International / Philippines

AID Grant #DAN-0045-G-SS-6068-00

HELEN KELLER INTERNATIONAL, INC.



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During the week of November 13-19, 1988, an on-site evaluation of a joint project between Helen Keller International (HKI) and the Government of the Philippines (GOP) was conducted by the following:

Dr. Dana B. Copp	Public health physician/ consultant U.S. Public Health Service Tucson, Arizona
Dr. John O. Gmunder	Director, "Sight and Life" task force Hoffman LaRoche Pharmaceuticals Basle, Switzerland
Jeffrey S. Watson	Asia-Pacific Regional Coordinator Helen Keller International, Inc. New York, N.Y.

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This team assembled in Manila on Monday, November 14, 1988 to initiate the evaluation of the HKI/GOP/USAID project funded under the Child Survival II grant #DAN-0045-G-SS-6068-00 in October of 1986. The major aims of the project are:

(a) to reduce the incidence of Vitamin A deficiency among children, ages 1 thru 6, through integration of Vitamin A supplementation for high risk cases into the existing primary health care (PHC) activities, and (b) to develop an effective low-cost method of achieving long-term adequate Vitamin A status among preschool children.

These objectives were to be accomplished through several project elements which include:

1. The selection of two demonstration service areas; one rural and one urban-depressed.
2. Development of a strategy for integrating Vitamin A intervention into the existing PHC delivery system.
3. Performing baseline surveys to establish existing rates of xerophthalmia, and other pediatric eye problems in the demonstration areas.
4. Instituting a system to monitor the Vitamin A status of children in the demonstration areas.
5. Development and evaluation of nutrition education/social marketing programs to motivate mothers regarding the vitamin status of their children.

Originally, this project planned to evaluate liquid vs. capsules Vitamin A delivery strategies (no longer a sub-objective under alternative delivery mechanisms), and to investigate the potential for fortification of foodstuffs with Vitamin A, which is now being pursued without the CS II grant funding.

The target population of this project is approximately 90,000 preschoolers in the rural province of Antique (Western Visayas), and about 21,000 selected preschoolers concentrated in the slums and "squatter" settlements of Las Pinas, a congested and economically depressed urban area on the southern coastal margin of Metro Manila. The project proposes to reach all these targeted children for case detection, and to provide Vit. A supplements only for those with clinical xerophthalmia or considered to be high-risk for Vit. A deficiency based on prolonged diarrhea, findings of 2nd and 3rd degree malnutrition, recent measles or acute respiratory infections.

**Schedule of Evaluation Team Activities:**

<u>Date/Time</u>	<u>Activity</u>	<u>Persons Involved</u>	<u>Venue</u>
Monday, Nov. 14.....			
8:30 AM	Orientation to Vit. A activities in Philippines	R. Klemm V. Pernito E. Villate Dr. E. Santos	HKI Ofc. (PICC)
1:00 PM	Vit. A program overview and update on activity	A. Ramos Project leaders HKI staff	DOH Ofc. Nutr.Svc.
Tuesday, Nov. 15.....			
8:00 AM	Discussion of dosage study	Dr. R. Florentino	FNRI
11:30 AM	Flight - Manila to Iloilo	Eval. team HKI staff	Domestic airport
2:00 PM	Interview with Regional Hlth. Ofcr. & staff	Dr. P. Ortiz RHO staff	RHO #6
3:30 PM	Mtg. with research staff at Central Philippine Univ. on baseline survey for SM evaluation	Fely David D. Sta. Maria	CPU campus
5:00 PM	Drive to San Jose (Antique)	Eval. team/HKI staff	
Wednesday, Nov. 16.....			
7:00 AM	Breakfast/project briefing on Antique Province	Dr. R. Garfin Dr. N. Tanchuan Dr. F. Casalan IPHO tech. staff	Prov. Hlth. Offices (IPHO)
8:00 AM	Field site visits to several rural health units, both coastal and mountain	Provincial Vit. A task force & health workers	
12:30 PM	Drive to Iloilo	Eval. team/HKI staff	
2:30 PM	Flight - Iloilo to Manila	- do -	
Thursday, Nov. 17.....			
8:30 AM	Meeting with DOH officials to discuss Vit. A project	Dr. C. Aranas	Dr. Roxas' ofc.- DOH
9:30 AM	Field site visits, Las Pinas: island squatter village, urban slum & health units	Eval. team HKI staff	

5:00 PM	Meeting with officials of Nutrition Ctr. of Philippines	Dr. F. Solon M. Solon	Peninsula Hotel
Friday, Nov. 18.....			
9:00 AM	Debriefing with HKI staff		HKI(PICC)
10:30 AM	Debriefing with DOH nutrition program staff	A. Ramos & staff	DOH Ofc. (Nutr.Svc.)
1:30 PM	Debriefing/discussion with USAID staff	B. Johnson K. Farr M. de Sagun	AID Ofc.
3:00 PM	Organize notes for report		Mandarin Oriental Hotel
Saturday, Nov. 19.....			
9:20 AM	Departure for home		

**Project Operating Environment:**

In any development project, one should not assume that the working environment conforms to some standard set of circumstances common to the Third World. Each project has unique aspects to its geographic, political and cultural setting which either enhance or inhibit the orderly implementation of planned activities. In the case of the Philippines, both the folly of man and the tempests of nature seem to have conspired against this project over the past two years. This Vitamin A deficiency demonstration project has confronted substantial problems (largely beyond the control of project staff), faltered a bit in places, yet appears to be making good progress in accomplishing its objectives.

For example:

(a) This project was started just after the "revolution" in the Philippine Government, which brought changes of leadership in many departments of the bureaucracy under the new Aquino administration. Though politically necessary, such a transition results in some loss of administrative experience and "know-how". At a time when the project was to be engaged in site selection, policy decisions and confirmation of its logistical design,..the new GOP leadership was somewhat tenuous in setting its new directions and, at that time, least prepared for definitive action. Current interpersonal relationships between HKI staff and their GOP counterparts appear to be cooperative and supportive, but initial phases of the project operations were undoubtedly delayed by these political circumstances.

(b) One of the selected demonstration sites for the project, Antique Province in the Western Visayas, is regarded as a stronghold for the rebel forces of the New People's Army (NPA). The threat of political violence is a daily reality in this area, as evidenced by the record of assassinations, kidnappings, etc. During the baseline survey in the early stages of the Antique project implementation, the survey teams visiting mountain villages frequently had to overcome skepticism or hostility from village leaders who were suspicious or uncertain of their intent. To the credit of those teams, they were able to survey all but two of the villages designated in the original plan.

(c) In terms of socio-economic status, Antique is one of the poorer provinces in the republic, with an average family income of \$1240 per year. Those villages located in the mountains suffer not only greater physical isolation, but more economic deprivation, malnutrition and more difficult access to public health facilities. During the baseline surveys, doctors found some villages with 16-20% incidence of xerophthalmia among the children.

(d) During the three weeks just prior to our evaluation, the Philippines had been hit by no less than three typhoons, causing extensive flooding and crop damage, washing out bridges and roadways which isolated the northern two-thirds of Antique Province, and destroying many of the makeshift homes on the windward side of the Las Pinas squatter villages involved in this project. Serious disruptions of the proposed schedule of project activities can be, and are, caused by "mother nature" in the Philippines, particularly during the stormy seasons.

(e) In 1986, there was a Vit. A supplementation/mortality study conducted in the Bicol region of southern Luzon. In association with that study, a number of side effects (nausea, vomiting) were reported including one claim of a child's death in response to oral administration of 200,000 I.U. of Vit. A. Unfortunately, those claims received extensive coverage in the press, and the unfavorable publicity suffused much of the Philippine population with a superficial negative attitude toward the use of Vit. A. capsules. This bias had to be overcome in implementing the current project in Las Pinas and Antique.

Note: as a reaction to this negative publicity, the NFRI undertook a dosage study, the results of which are described in the attachments (pages 13-14). This is an excellent example of how the HKI expertise and assistance functions as a positive force in the formulation of health care policy in the developing world.

Given the multitude of obstacles, both natural and man-made, that this project has had to surmount, it is impressive that the survey teams, primary health care workers and nutrition educators have been able to accomplish as much as they have.

### Summary of Review Findings:

This Vitamin A deficiency demonstration project has confronted substantial problems as described in the section on "project operating environment", but should be given credit for having achieved a great deal under what might be euphemistically called "trying circumstances".

The infrastructure supporting this project and its activities is worthy of special comment. Despite having heard verbal references to the health delivery system as being "weak", with little monitoring or discipline, those we met at both the Regional and Provincial levels of operations, in the public health facilities and program offices seemed to be exceptionally well organized in epidemiologic monitoring and program implementation. Detailed, current data were readily forthcoming from responsible supervisors, and were often prominently displayed at the operational centers. Health care personnel at all levels from the Regional offices through the small health centers were surprisingly well informed and conversant about about any of the 21 special projects (including VAD) in which they are currently participating. The field health workers seem to have convinced themselves of the value of Vit. A through administering it and seeing, first-hand, the improvement it has produced. As a result they appear to be enthusiastic about their roles in the project and are pursuing their responsibilities with a "missionary zeal", in many cases. Since there is a project-specific provincial task force to deal with the Vit. A program, it is possible that what we saw in the brief one-week review could have been an exception to the rule.

The presentation of project progress given by Ms. Adelisa Ramos and her staff at the DOH Nutrition Service in Manila was particularly well-organized, detailed and informative. The relaxed, but dignified candor of the presenting staff members belied their comparative youth and spoke eloquently of their knowledge of project details.

The contract staff at Central Philippine University, led by Ms. Fely David, are a highly skilled and professional team of researchers, well prepared and equipped to perform the social marketing survey and data analysis for the project. All this skill and enthusiasm at the periphery of the health care system is particularly striking because it is superimposed on a very "laid back", almost lackadaisical, rural society. I must admit that I am totally unaccustomed to such a contrasting juxtaposition of bright, energetic intensity against a relaxed rural background.

Health care delivery is structured in a standard tiered fashion with a volunteer health worker for about every 20 households at the peripheral margins of the system, doing screening, education (no treatment) and referral for individuals needing treatment to the *Barangay* health stations, staffed by a midwife and serving about 5,000, primarily for maternal and child health services, immunizations, etc. The midwife refers more difficult cases to the rural health unit (RHU), staffed by a doctor and nurse, which serves 20-25,000 people. These RHUs, in turn, refer to the district hospitals which serve 100,000 or more. Those in need of specialty care or more complex treatment are sent on the provincial hospitals and treatment centers.

Each of the project's target areas has a significant incidence of Vit. A deficiency, as documented by the baseline surveys:

Las Pinas (selected slum areas).....	3.90%	xerophthalmia
Antique (coastal villages).....	3.17%	"
(highland villages).....	5.91%	"

With the delays in project timeline, there is not yet the necessary monitoring data to determine whether the project has had any impact on the incidence of eye problems related to Vit. A deficiency. But it has had an observable effect on the awareness level of both health professionals and village residents.

There are two young physicians who were recruited for participation in the Antique Province baseline surveys, and who talk enthusiastically about their experiences during that arduous task. One was so impressed by his experiences in this project that he is altering his career plans,...pursuing Vit. A dosage research and planning MPH studies to prepare him for a career in public health.

Also, part of the project involves training offered in the rural communities to enable non-health workers to identify children with night blindness, Bitot's spots or xerophthalmia. As we visited in one rural community, school teachers heard of our presence and brought us two young male students they suspected of having eye problems. One did, indeed have Bitot's spots, but the incident reflected a level of awareness in the community which was, undoubtedly, the direct result of the project's education campaign.

The social marketing (SM) component of this project was among the latest elements to be implemented. The DOH was to have a social marketing advisor with whom project activities could be coordinated, but that advisor only started working fulltime in January, 1988. Vit. A messages weren't broadcast until September 19, 1988 on nine commercial stations and thirteen public service radio stations. An outline of the SM campaign and its budget can be found in pages 22 to 25.

The current CSII grant seems to provide adequate funds for completion of this project, though it will require an extension of time to adequately monitor the effect of these demonstrations for reduced incidence of VAD, effectiveness of SM strategies and the project's education/training impact.

The sustainability of this project activity after the grant period is still uncertain. There appears to be strong philosophical support from the FNRI and DOH Nutrition Service for the government to subsidize vitamin A fortification as a long-term solution to the deficiency in preschoolers. However, we are informed that the Undersecretary for Public Health Services, Dr. Manuel Roxas, is allergic to MSG and has some understandable reticence regarding any national program of MSG fortification. Fortification is probably still the best long term solution to the deficiency and should be pursued.

Since there remains some question of affordability and relative priority for limited national resources to support widespread Vit. A capsule distribution, the prospects for independent sustainability remain a bit uncertain. The Government of the Philippines has made verbal commitments to sustain the effort, which we can expect to be honored if their resources permit.

#### **Evaluation Team Recommendations:**

The dominant impression derived from this review is that the Vit. A project in the Philippines has experienced more difficulties from external factors than from any internal defects in planning, personnel, management or discipline of implementation in the project's activities. As a result of that perception, the evaluation team focused its recommendations more on the opportunities for HKI to facilitate the effective coordination with its governmental counterparts in the DOH. This is not a criticism of HKI staff, who displayed impressive tact, judgement and maturity in their interpersonal relationships with DOH staff. Person-to-person relationships and cooperation seem to be excellent, but the methodology for getting things done is often a bit difficult and, perhaps, inappropriate.



1. We recommend that the project be granted the required time extension for the completion of its activities, without additional funds. There appear to be no major flaws in the design of the project, and those field personnel implementing the project seem both committed and technically proficient. Based on that enthusiasm and competence, HKI/GOP might want to consider an expansion of this effort in the Philippines in the near future.
  
2. Although there has been obvious improvement in the experience and effectiveness of the central bureaucracy in the Philippines, it is still difficult for department officials to get out to the field and familiarize themselves with the nuances of local capabilities and problems. The evaluation team believes that central control of projects has slowed their progress and that decentralizing the planning, implementation, management and evaluation of health care projects would greatly facilitate their objectives. Our limited exposure would indicate that there are very capable administrators at the regional and provincial health offices, who could efficiently and effectively implement projects such as this without the excessive layering of authorizations, decision-making and approvals. We believe the decentralization of responsibility would also enhance the opportunity to more quickly integrate "special focus" projects, like the Vitamin A deficiency program, into the mainstream of primary health care. Since the 13 Regional Health Officers are more likely to know the local capacities, we would suggest that they be authorized to designate provincial project leaders, for instance, rather than those designations being made from Metro Manila.
  
3. The evaluation team suspects that HKI staff, in their role as subject expert advisors/catalysts, might strengthen DOH planning efforts (in programs within their area of expertise) by providing DOH officials with more detailed information and more concrete suggestions regarding their options, based on HKI's world-wide field experience and monitoring of research in Vit. A, cataracts, rehabilitation and blindness prevention. As part of this effort, we recommend that HKI staff in Manila provide regular brief summary updates on pertinent eyecare findings from other programs, to key officials like Dr. Roxas, Dr. Aranas, Dr. Florentino, Ms. Ramos, etc.

4. There are times when substantial benefit can be derived from a modest investment in a specific local activity such as a special conference, a small research study or meeting the need for adjunct funding to support a worthwhile project,....provided the investment can be committed easily and quickly, without serious delay. While not recommending the action, per se, the evaluation team suggests HKI headquarters consider the pros and cons of making modest amounts of unobligated resources available to Country Directors (or Regional Coordinators) for their discretionary use on such occasions.

In closing, we realize that our discussion and recommendations have strayed from the normal range of concerns dealt with in a project evaluation. However, we believe the unique circumstances over the past two years in the Philippines presented us with a situation in which the interests of the Government of the Philippines, as well as those of HKI and USAID, would not have been well served by a narrow review of project operations without a more thoughtful consideration of the influences which appear to seriously affect its implementation and outcomes.

## TRAINING-WORKSHOP FOR NATIONAL VADAG CORE TRAINORS

## RATIONALE

Experiences in the Vitamin A project areas has shown that there is a need of a special support during the training of the frontline health workers. It is necessary that knowledge and skills of the frontline health workers be standardized and reinforced to ensure the most effective delivery of basic health services.

The VAD-AG training programs' special feature is the organization and training of a National VAD-AG Core Trainors. The team of is composed of multi disciplinary health staff will be assigned to a specific provinces to assist in the VADAG training at the Regional/Provincial and District level.

## A. OBJECTIVES OF THE TRAINING-WORKSHOP OF THE NATIONAL VADAG CORE TRAINOR

The seminar/workshop for the Core Trainors aims to provide the participant with the knowledge, attitudes, and skills which will enable them to perform the task assigned as member of the National VADAG Core Trainer.

## B. EXPECTED OUTPUT

The expected output will be a VADAG Training Package

1. Five VADAG Training Modules
  - a. Clinical Module--The Problem, Epidemiology, Functions, Metabolism
  - b. Clinical Module--Case Detection, Treatment and Management
  - c. Community Involvement
  - d. Nutrition Education
  - e. Other Program Component
    - a. Planning
    - b. Targetting
    - c. Training
    - d. Supervision
    - e. Monitoring & Evaluation
2. Vitamin A Training Plan for the Regional and Provincial trainees

## C. DATE AND VENUE

Date: September 11-16, 1989  
 Duration: 6 days  
 Venue: Villa Pansol, Laguna

**D. JOB DESCRIPTION OF THE NATIONAL VADAG CORE TRAINORS**

Specifically the National VADAG Core Trainors are expected to perform the following tasks:

**1. PLANNING**

- \* assist in the development and finalization of the VADAG training curriculum and training plan

**2. TRAINING**

- \* provides over-all guidance in the implementation of the VADAG training program
- \* provides technical assistance as resource person to specific areas like clinical, nutrition education, monitoring and evaluation.

**3. MONITORING & EVALUATION**

- \* conducts monitoring and supervision of VADAG Training plan at all levels
- \* evaluates training program at all levels and provides written feedback on strengths, weaknesses, recommendations for improving training program

**E. SELECTION OF THE NATIONAL VAD-AG CORE TRAINORS**

The National VADAG Core Trainors will be composed of Department of Health staff from the Nutrition Service, Vitamin A Pilot areas Las Pinas, NCR and Region 8 and Antique Province. Also included are representative from other health services and health staff from other regions and NGOs.

They are the following:

**NUTRITION SERVICE**

- |                         |  |
|-------------------------|--|
| 1. Mrs. Chit Flores     | Asst. Chief Nutritionist<br>Plans & Programs |
| 2. Mrs. Chorie Ignacio  | Supervising Dietary Nutritionist             |
| 3. Ms. Marie Etorma     | Supervising Dietary Nutritionist             |
| 4. Ms. Irene Sanchez    | Sr. Dietary Nutritionist                     |
| 5. Ms. Josie Guiao      | Dietary Nutritionist II                      |
| 6. Ms. Evelyn Llano     | Dietary Nutritionist II                      |
| 7. Ms. Juris Triumphant | Dietary Nutritionist II                      |
| 8. Dr. Lourdos Paulino  | Medical Specialist I                         |
| 9. Dr. Emily Malata     | Medical Specialist I                         |
| 10. Dr. Gerardo Bayugo  | Public Health Specialist                     |

**NATIONAL CAPITOL REGION**

- |                       |                         |
|-----------------------|-------------------------|
| 11. Dr. Lourdes Culla | Health Center Physician |
| 12. Dr. Ruben Siapno  | Medical Specialist      |
| 13. Mrs. Tess Alvarez | SDN, NCR                |

ANTIQUÉ, REGION 6

- 14. Dr. Fritz Casalan
- 15. Dr. Fred Eben Castro

Resident Physician, ASMGH, San Jose  
Antique  
RHP, San Remigio, Antique

MCH  
16.

PIRES  
17.

- HEMDTS  
18. Ms. Grace Fernando

Sr. Manpower Development Officer,  
HEMDTS

HIS  
19.

- REGION 1  
20. Ms. Imelda Angeles

SDN, Region 1

- REGION 10  
21. Ms. Beryl Go

SDN, Region 10

- REGION 8  
22. Ms. Emily Grande

SDN, Region 8

- HKI  
23. Ms. Ellen Villate

Vit. A Program Coordinator

- DECS  
24. Ms. Thelma Ramoso

Educational Project Evaluation  
Officer, DECS

- NGO  
25. Mrs. Susie Limbo

Supervising Nutritionist, NFP

- II. VADAG CONSULTANT  
1. Dr. Florentino S. Solon

Over all VAD-AG Consultant  
Executive Director, NCP

RESOURCE PERSONS

- FOR VITAMIN A CLINICAL  
2. Dr. Eva O. Santos

Program Consultant, Ophthalmologist  
HKI

- FOR THE NIEO  
3. Adelisa C. Ramos  
4. Teresita Marie P. Bagasao

Chief, Nutrition Service  
Deputy Executive Director,  
KARAIKAT  
Country Director, HKI  
SM Project Manager & Communications  
Adviser, HKI

5. Rolf D.W. Klema  
6. Virgilio L. Pernito

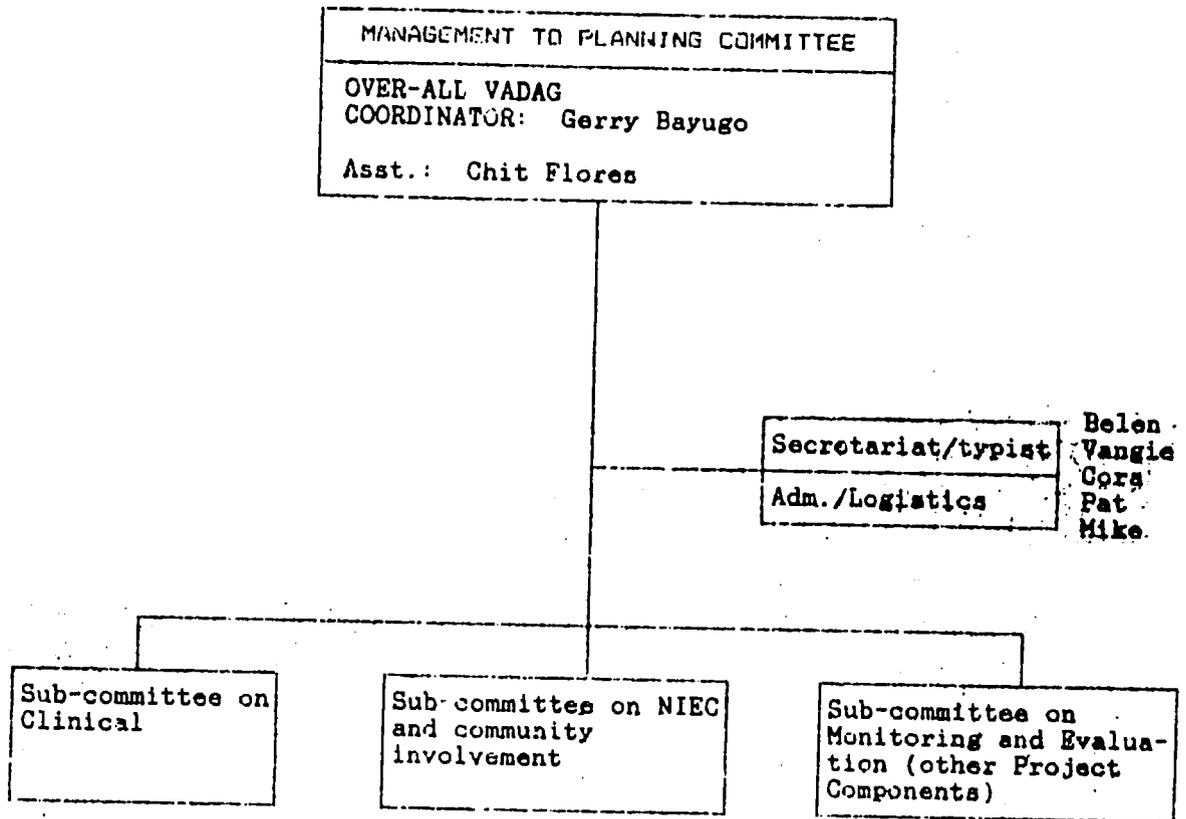
- FOR TRAINING  
6. Rebecca Barile  
7. Marcedita Cavancero

Training Officer, RHTC, Region 6  
Chief, RHTC, NCR

- FOR MONITORING & EVALUATION  
8. Prof. Nestor Raneses

Vitamin A Project Consultant  
Systems, NEC, UP

III. PROPOSED ORGANIZATIONAL SET-UP OF THE NATIONAL VADAG CORE TRAINORS



- VADAG**  
-----
- Vit. A - Fritz Casalan  
Ellen Villate  
Josie Guiao
  - Anemia - Dr. Malata  
MCH  
Imelda
  - Goiter - Dr. Paulino  
Emily Grande

- NIEC**  
-----
- Chorie Ignacio
  - Evelyn
  - Dr. Siapno
  - Thelma Ramoso
  - Beryl
  - PIHES
  - Grace Fernando
  - Rolf Klemm

- Chit Flores
- Marie Etorma
- Juris
- Tess Alvarez
- HIS
- Dr. Gerry Bayugo
- Irene Sanchez

- COMMUNITY INVOLVEMENT**  
-----
- Dr. Eben Castro
  - Dr. Culla
  - Susie Limbo

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HOUSE RULES

1. TRANSPORTATION

All transportation and resource persons are to assemble at NS-DOH at 1:00 PM on September 11, 1989.

Vehicles available are:

Rolf's car  
HKI red Tamaraw  
NS-DOH

Two vehicles will be available the whole week at the training site. On Saturday September 16, participants may avail of the same transportation and shall be dropped off at their most convenient points.

2. LIVING ARRANGEMENTS

Participants and resource persons shall be housed in (8) cottages at Villa Pansol.

Check in time: 3:00 PM - September 11

Check out time: 2:00 PM - September 16

Room/cottage assignments shall be issued upon check-in.

3. TRAINING-WORKSHOP VENUE

Venue for the lectures and workshops shall be at \_\_\_\_\_

4. REGISTRATION

Participants shall register with the secretariat at NS-DOH upon arrival. They shall be given training kits and name tags, which should be displayed throughout the duration of the training. Handouts, exercises and worksheets shall be provided during the sessions.

5. ATTENDANCE/PUNCTUALITY

Each participant is expected to live-in throughout the duration of the training and attend all session. Punctuality should be observed.

6. MEALS & SNACKS

Meals shall be served at the dining room at the following schedules:

Breakfast: 7:00 - 7:45  
Lunch : 12:00 - 1:00  
Supper : 7:00 - 8:00

Morning and afternoon snacks shall be served at the lecture or workshop rooms.

## **WORKSHOP GUIDELINES**

### **A. Grouping**

The participants shall be grouped into four on the basis of their expertise. The same grouping shall be maintained in all workshop sessions. Each group shall elect a chairman and a co-chairman.

### **B. Duties and Responsibilities**

#### **Facilitators/Resource Persons:**

1. Clarify any issue that may arise.
2. Review workshop outputs based on its adequacy, correctness and appropriateness.
3. Make the necessary recommendations to the group.
4. Supervise workshop proceedings in order to attain the workshop objectives.
5. Act as resource persons.

#### **Chairman:**

1. Sets climate for rapport.
2. Clarifies workshop objectives/expectations
3. Directs group activities to achieve workshop objectives.
4. Time manager.
5. Encourages group participation.
6. Reports group outputs during plenary sessions.

#### **Co-chairman:**

1. Records proceedings of the workshop within the group.
2. Prints the group's outputs in acetate for presentation during plenary sessions.

#### **Members:**

1. Participate in the discussions.
2. Assist co-chairman in printing of workshop outputs for presentation.
3. Secure from Secretariat all materials needed for the workshop.

#### **Secretariat:**

1. Handouts, worksheets and other pertinent materials
2. Typing and clerical services
3. Documentation of proceedings

C. Workshop Procedures

1. Exercises shall be accomplished by the groups within the time allotted for the workshop sessions. Worksheets and guidelines shall be provided.
2. Workshop outputs should be reviewed by the facilitators before presentation during plenary session.
3. Final drafts of the outputs should be submitted to Secretariat for typing and packaging.

D. Plenary Sessions

Reactions from the other groups and the resource persons shall be used as basis for finalizing the outputs during plenary sessions.

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TRAINING-WORKSHOP OF NATIONAL VADAG CORE TRAINERS  
 SCHEDULE OF ACTIVITIES  
 SEPTEMBER 11-16, 1989

TIME	DAY	SEPTEMBER 11 MONDAY	SEPTEMBER 12 TUESDAY	SEPTEMBER 13 WEDNESDAY	SEPTEMBER 14 THURSDAY	SEPTEMBER 15 FRIDAY	SEPTEMBER 16 SATURDAY
7:00 - 8:00		B R E A K F A S T					
8:00 - 10:00			OPENING PROGRAM LECTURE 2: VADAG TRAINING EXPER. FC LECTURE 1: OVERVIEW OF TRAINING PROCESS. AB	LECTURE 5: USE OF VISUAL AIDS. GP WORKSHOP	PRESENTATION CLINICAL MODULE VITAMIN A	PRESENTATION COMMUNITY INVOLVEMENT	PLENARY
10:00 - 10:15		A M S N A C K					
10:15 - 11:00			CONTINUATION OF LECTURE 3				
11:00 - 12:00			WORKSHOP (start)	- DO -	VITAMIN A	NUTRI-ED	- DO - CLOSING PROGRAM
12:00 - 1:00		L U N C H					
1:00 - 3:00		TRAVEL TO VILLA PANSOL, LAGUNA CHECK-IN	WORKSHOP • LEARNING OBJECTIVES • CONTENT • METHODOLOGY	LECTURE 6: TRAINING EVA- LUATION. MC WORKSHOP		ANEMIA	NUTRI-ED
3:00 - 3:15		P.M. S N A C K					
3:15 - 5:00		GROUP DYNAMICS. GP OVERVIEW OF THE TRAINING WORKSHOP	DO	DO		IDD	OTHER PROGRAM COMPONENT
5:00 - 7:00		D I N N E R					
		LECTURE 4: OVER- VIEW OF VADAG PROGRAM. ACB LECTURE 3: ORIE- NTATION TO WORK- SHOP. DEVELOPING THE TRAINING SYLLABUS. NR	DO	LECTURE 7: SKILLS IN COMMUNICATION/ BASIC TECHNIQUE IN COMMUNICATING MASS MEDIA. VLP	FREE TIME	DO	WORKSHOP FOR REGIONAL/ PROVINCIAL TRAINING PLAN

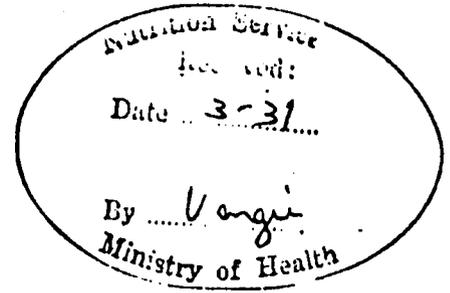
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Republic of the Philippines  
Department of Health  
OFFICE OF THE SECRETARY

345-4  
SAN LAZARO COMPOUND  
RIZAL AVENUE, STA. CRUZ  
MANILA, PHILIPPINES  
TEL. NO. 711-60-80  
APPENDIX 11

March 7, 1989



DEPARTMENT CIRCULAR  
No. 41-A s. 1988

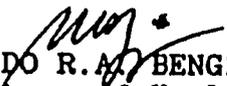
TO : The Regional Health Directors, Provincial and City Health Officers, Chief of District Hospitals, Rural Health Personnel and others concerned.

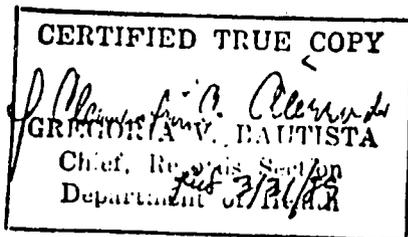
SUBJECT : GUIDELINES ON THE TREATMENT OF XEROPHTHALMIA

For the standard classification, management and treatment of children identified to be suffering from severe vitamin A deficiency (xerophthalmia), this guideline in the diagnosis and management updates Department Circular # 97 of 1973.

This updated guideline will serve as ready reference and provide a uniform system of classification as well as proper management of children suffering from xerophthalmia. It will minimize or eliminate confusion among health workers on the diagnosis and treatment of children suffering from xerophthalmia and will facilitate the submission of reports on this matter.

Please be guided accordingly.

  
ALFREDO R. BENGZON, M.D.  
Secretary of Health



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**GUIDELINES ON THE TREATMENT & MANAGEMENT OF  
XEROPHTHALMIA**

**INTRODUCTION**

In 1982 FNRI reported that xerophthalmia affects 3.5% or 1 in 29 Preschool children. A recent study undertaken by NS-DOH-HKI in 1987 showed high rates of xerophthalmia, 4.0% and 3.6% for Antique and Las Pinas respectively. The magnitude of xerophthalmia problem in the country is 3 to 4 times higher than the critical level established by WHO. WHO classifies the Philippines as "Class 1" (significant public health problem in part of whole country) in the countries' classification by degree of public health significance of vitamin A deficiency, xerophthalmia and nutritional blindness.

Realizing the urgency and the immediate need of identified children to be given medical attention, a high dose vitamin A capsule supplementation policy has been adopted as one of the multi-pronged approaches to combat VAD. High dose vitamin A administration can produce dramatic relief on the patient's condition and immediate reduction of the problem.

Moreover, on a recent inventory of the different vitamin A preparations existing in the different health offices, it revealed several preparations are being distributed to service targets. Because of the diversity of the preparations, confusion has arisen as to the proper dosage to be administered to patients.

The objective of the guideline is to provide a standard or uniform dosing of children suffering from Vitamin A deficiency with high dose Vitamin A Capsule (VAC) and other vitamin A preparations available in the field.

I. Clinical Guidelines for Diagnosis & Management of Xerophthalmia

A. To serve as guide on the diagnosis and management of xerophthalmia, the following points need to be considered, using 200,000 IU Vitamin A Capsule (VAC).

TARGET	CLINICAL MANIFESTATIONS		TREATMENT (TO BE ADMINISTERED BY MD'S, PHN'S AND RHM'S)
1-6 years and 11 months old (12-83 mos)	NIGHTBLINDNESS (XN)	<ul style="list-style-type: none"> <li>-- earliest manifestation of VAD</li> <li>-- child have difficulty seeing in the dark and refuses to play after dusk</li> <li>-- stumbles on furniture</li> <li>-- gropes for food</li> <li>-- ask questions at dusk like: "Is it already dark? Where is the door?"</li> </ul>	200,000 IU or 1 cap now 200,000 IU or 1 cap next day 200,000 IU or 1 cap after 2 weeks
	BITOT'S SPOTS (X1B)	<ul style="list-style-type: none"> <li>-- frequently associated with nightblindness</li> <li>-- soap sud, pearly elevations seen on outer portion of conjunctiva which could be removed but reaccumulates later</li> <li>-- a result of a long standing lack of Vitamin A</li> </ul>	200,000 IU or 1 cap now 200,000 IU or 1 cap next day 200,000 IU or 1 cap after 2 weeks
	CORNEAL XEROSIS (X2)	<ul style="list-style-type: none"> <li>-- appears as dryness of the cornea</li> <li>-- cornea looks dull with tiny pits or depressions like an orange peel</li> <li>-- child's vision is diminished even at day time</li> </ul>	200,000 IU or 1 cap now 200,000 IU or 1 cap next day 200,000 IU or 1 cap after
	CORNEAL ULCER/ KERATOMALACIA (X3)	<ul style="list-style-type: none"> <li>-- most severe manifestation of VAD</li> <li>-- cornea is hazy or smoky white with areas of softening</li> <li>-- area of ulceration may bulge or burst</li> <li>-- can lead to permanent blindness</li> <li>-- children with prolonged diarrhea and measles frequently develop this stage</li> </ul>	200,000 IU or 1 cap now 200,000 IU or 1 cap next day 200,000 IU or 1 cap after 2 weeks
	CORNEAL SCAR (XS)	<ul style="list-style-type: none"> <li>-- inactive VAD or healed corneal damage</li> <li>-- minimal scar slightly impairs vision but extensive scars may cause total blindness</li> </ul>	Give 3 capsules as above if associated with XN, X1B, X2, or X3. Give 1 capsule only if not associated with any of the above signs and symptom.

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B. Guideline on the use of different Vit. A Preparations in the Treatment of Xerophthalmia

TARGET	CLINICAL MANIFESTATIONS	TREATMENT		
		IMMEDIATELY UPON DIAGNOSIS (TOTAL DOSE: 200,000 IU)	THE FOLLOWING DAY TOTAL DOSE: 200,000 IU	AFTER 2 WEEKS TOTAL DOSE: 200,000 IU
1 - 6 YRS AND 11 MONTHS OLD (12 - 83 MOS.)	NIGHTBLINDNESS (XN)	GIVE 4 TABS/CAPS OF 50,000 IU ACON OR AFAXIN OR ALPHAVIT	GIVE 4 TABS/CAPS OF 50,000 IU ACON OR AFAXIN OR ALPHAVIT	GIVE 4 TABS/CAPS OF 50,000 IU ACON OR AFAXIN OR ALPHAVIT
	BITOT'S SPOTS (X1B)	OR	OR	OR
	CORNEAL XEROSIS (X2)	GIVE 8 TABS/CAPS OF 25,000 IU ACON OR AFAXIN OR ALPHAVIT	GIVE 8 TABS/CAPS OF 25,000 IU ACON OR AFAXIN OR ALPHAVIT	GIVE 8 TABS/CAPS OF 25,000 IU ACON OR AFAXIN OR ALPHAVIT
	CORNEAL ULCER/ KERATOMALACIA (X3)			
	CORNEAL SCAR (X5)	GIVE AN EQUIVALENT DOSE OF 200,000 IU AS ABOVE BUT ONCE ONLY		

AS FOR THE DROP PREPARATION, USE IT IN INFANTS UNDER 1 YEAR OLD WITH XEROPHTHALMIA GIVING 100,000 IU PER DOSE

\*DUPHASOL DROPS: 2 ML (100,000 IU) UPON DIAGNOSIS )  
2 ML (100,000 IU) THE FOLLOWING DAY ) FOR XN, X1B, X2, X3  
2 ML (100,000 IU) AFTER 2 WEEKS )

2 ML (100,000 IU) ONCE ONLY FOR X5

OR

\*RETINOL DROPS: 6.6 ML (100,000 IU) UPON DIAGNOSIS )  
6.6 ML (100,000 IU) THE FOLLOWING DAY ) FOR XN, X1B, X2, X3  
6.6 ML (100,000 IU) AFTER 2 WEEKS )

6.6 ML (100,000 IU) ONCE ONLY FOR X5

- C. Conduct dietary counselling to mother to increase and improve intake of Vitamin A rich foods. Emphasis should be made on increase intake of 1/2 cup of green leafy vegetables daily and addition of oil to their food preparation for better Vitamin A absorption.

## II. MONITORING GUIDELINES

1. Children who received high dose vitamin A preparation should be closely observed and followed-up to monitor possible side effects.
2. A monitoring system should be developed and integrated into the existing health system such as:
  - a. provision of a master list of vitamin A capsule recipients
  - b. information on the compliance of the 2nd and 3rd degree
  - c. information on the findings on what clinical eye signs or symptoms were observed
  - d. information on dose reactions
3. Receipt of vitamin A capsule should be indicated on the growth chart of all preschoolers given VAC (except those beyond 72 months of age).

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Republic of the Philippines  
Department of Health  
NUTRITION SERVICE  
Manila

July 3, 1989

APPENDIX 1.2

FOR : Undersecretary Manuel G. Roxas  
Office for Public Health Services

THRU : Dr. Consuelo D. Aranas  
Regional Director, OPHS

FROM : Adelisa C. Ramos  
Chief, Nutrition Service

SUBJECT : GUIDELINES ON THE PREVENTION OF VITAMIN A  
DEFICIENCY, XEROPHTHALMIA AND NUTRITIONAL  
BLINDNESS

Attached is the revised Department Circular for your endorsement. This circular focuses on the administration of high dose of vitamin A to individuals at special risk of developing vitamin A deficiency, xerophthalmia and nutritional blindness. All suggestions of Undersecretary Mario Taguiwalo, chief of staff were considered.



Republic of the Philippines  
Department of Health  
**NUTRITION SERVICE**  
Manila

July 3, 1989

**DEPARTMENT CIRCULAR**  
No. \_\_\_\_s. 1989

**TO :** The Regional Health Directors, Provincial and City Health Officers, Chief of District Hospitals, Rural Health Personnel and others concerned.

**SUBJECT :** GUIDELINES ON VITAMIN A SUPPLEMENTATION FOR THE PREVENTION OF VITAMIN A DEFICIENCY. XEROPHTHALMIA AND NUTRITIONAL BLINDNESS.

This guideline provides a standard classification and management of individuals identified at high risk of developing Vitamin A deficiency, xerophthalmia and nutritional blindness. It complements Department Circular 41-As 1989 entitled Guideline on the Treatment of Xerophthalmia for the National Vitamin A Deficiency Control and Prevention Program.

All concerned, please be guided accordingly.

**ALFREDO R.A. BENGZON, M.D.**  
Secretary of Health

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**GUIDELINES ON THE PREVENTION OF VITAMIN A DEFICIENCY,  
XEROPHTHALMIA AND NUTRITIONAL BLINDNESS**

**1. POLICY**

The Department of Health shall seek to reduce morbidity associated with Vitamin A Deficiency. In addition to the management and treatment of cases suffering from severe Vitamin A Deficiency, measures to prevent Vitamin A Deficiency shall be taken. Supportive preventive measure is the periodic supplementation with large doses of Vitamin A. Principal measure is conduct of dietary counselling of mothers to increase and improve family intake of Vitamin A-rich food.

**2. VITAMIN A SUPPLEMENTATION: CLINICAL CONSIDERATIONS**

**2.1 Rationale**

Vitamin A (retinol) is a fat-soluble substance that is stored in the human body, principally in the liver, and released as needed into the bloodstream. Periodic supplementation of large doses of Vitamin A (according to attached clinical guidelines) is intended to protect the individual against Vitamin A Deficiency and its serious consequences over a certain period of time by building up a reserve of Vitamin A in the liver. Priority targetting for Vitamin A Supplementation is based on public health considerations.

**2.2 Dosage**

The large/high dose Vitamin A capsule contains 200,000 I.U. Vitamin in oil. Prevention schedule is described in attached clinical guidelines.

**2.3 Safety**

Vitamin A Supplementation, even for cases that do not exhibit clinical manifestation of Vitamin A Deficiency, are known to be effective and safe. Some side effects may occur, such as headache, nausea and vomiting. These are, however, mild and transitory (disappears within 24 hours), and do not require specific treatment. Acceptance will be high, provided health workers properly advise mothers regarding the risk and benefit of supplementation.

Mothers of children who receive 200,000 IU Vitamin A preparation should be specially advised on possible reactions (i.e. nausea and vomiting). If such reactions are observed, the child should be closely monitored and followed-up.

## 9. VITAMIN A SUPPLEMENTATION: PUBLIC HEALTH CONSIDERATIONS

### 3.1 Rationale

Severe or moderate malnutrition, chronic diarrhea, recent measles and acute lower respiratory infections, individually or together, adversely affect the child's intake, absorption and utilization of Vitamin A. Children with these conditions, therefore, are at highest risk for Vitamin A Deficiency.

### 3.2 Targetting

#### High-Risk Distribution

Priority target groups for Vitamin A Supplementation are infants and children with current or recent conditions such as chronic diarrhea, acute lower respiratory tract infections, moderate/severe malnutrition and recent measles.

#### Universal Distribution

Priority target communities (household cluster, barangay, town, district or province) for Vitamin A Supplementation are those subject to the following conditions:

- recent or current measles outbreak, particularly when there is a high-risk for epidemic spread;
- known prevalence rate of xerophthalmia (using corneal ulcer/keratomalacia as criteria) of 3% or more. These conditions should be covered by universal distribution of Vitamin A for all children 6-83 months of age and lactating mothers within one month after delivery according to preventive schedule.

### 3.3 Operations

#### 3.3.1 Supply of Supplement

The Department of Health shall procure standard preparation of Vitamin A using generic name. The Central Office shall procure Vitamin A capsules through UNICEF and shall allocate it depending on the regional requirement.

### 3.3.2 Distribution and Administration

Distribution of Vitamin A preparations is a responsibility of a trained midwife or other trained health personnel. A volunteer health worker or other community worker may distribute Vitamin A supplements as long as he/she has been trained and closely supervised by a midwife or other health personnel.

Universal distribution of Vitamin A supplements is the provision of Vitamin A using the standard Dose and Schedule for all infants and children who are 6-883 months of age and lactating mother within one month after delivery.

### 3.3.3 Monitoring

1. Mothers of children who received 200,000 I.U. Vitamin A preparation should be advised on possible reactions (i.e. nausea and vomiting). If such reaction is observed, the child should be closely monitored and followed-up.
2. A monitoring system should be developed and integrated into the existing health system such as:
  - a. provision of a masterlist of Vitamin A capsule recipients;
  - b. information on the compliance of the 2nd and 3rd degree underweights;
  - c. information on the findings on what clinical eye signs or symptoms were observed;
  - d. information on dose reactions.
3. Receipt of Vitamin A capsule should be indicated on the growth chart of all pre-schoolers given Vitamin A capsule.

## 4. DIETARY COUNSELLING/NUTRITION EDUCATION

Frequent, varied repetition of Vitamin A information from all sides over many years and from many trusted services, can truly succeed in putting new health knowledge at the disposal of the majority of the target audience. Although this approach is long-term in nature, its effects are more permanent. The following messages may be imparted to target groups through posters, print materials or through individual advice given while doing routine examination or during contact with mothers/caretakers.

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**For mothers with 0-12 months old babies**

- \* breastfeed your baby as soon as he is born;
- \* give the colostrum (the first yellowish milk that comes out). It has antibodies which help protect your baby from infection;
- \* breastfeed continuously up to 2 years, if possible.

**For mothers with weaning age pre-schoolers (4-12 months)**

- \* continue breastfeeding
- \* start giving supplementary foods as early as four months in small quantity;
- \* feed your child with 2-4 tablespoons of green leafy vegetables everyday. Mash the vegetables, mix them in lugaw and add a few drops of cooking oil.

**For toddlers and pre-schoolers (1-6 years old)**

- \* feed your child with 1/2 cup to 1 cup of green leafy vegetables cooked with cooking oil or gata everyday;
- \* foods rich in Vitamin A promote good eyesight, healthy growth and fight illnesses.

**For pregnant and lactating mothers**

- \* eat 1 cup of green leafy vegetables cooked with cooking oil;
- \* foods rich in Vitamin A help in the normal growth and development of the baby;
- \* regular intake of Vitamin-rich foods will increase the production and secretion of milk.

Health workers must always recommend the following foods rich in Vitamin A

**Animal Sources**

Liver (beef, pork, chicken)  
Meat (beef, pork, chicken)  
Clams and other shellfish  
Egg  
Aligue  
Fish  
Talangka

## Plant Sources

Dark Green Leafy Vegetables (tops and leaves) such as:

Ampalaya  
Gabi leaves  
Alugbati  
Malunggay  
Kangkong  
Ispinaka  
Saluyot  
Sili leaves  
Letsugas

Camote leaves  
Mustasa  
Kamoteng-kahoy leaves  
Sayote tops  
Petsay  
Pako  
Patola leaves  
Kalabasa leaves

## Yellow Vegetables and Fruits

Carrot, tuber  
Kalabasa, fruit  
Saging  
Yellow Corn

Mangga  
Milon - kastila  
Papaya - ripe  
Tiesa

**Clinical Guideline for Diagnosis and Management of High-Risk Children and Post Partum Mothers for Vitamin A Supplementation Using 200,000 IU Vitamin A Capsule (VAC)**

TARGET	HIGH-RISK CONDITIONS		PREVENTION SCHEDULE	
			DOSAGE	FREQUENCY
PRESCHOOLERS 12-83 mos.	Malnutrition	Severe (3rd degree) or moderate (2nd degree) malnutrition as determined by weight for age of child.	200,000 IU	GIVE ONE (1) 200,000 IU VIT. A CAPSULE UPON DIAGNOSIS OF ANY OF THESE CONDITIONS AND SIX MONTHS THEREAFTER IF THE HIGH RISK STILL EXISTS.
	Chronic Diarrhea	Passing of three or more watery stools for more than 2 weeks caused by infection, malnutrition or other parasites.		
	Measles	Children with measles or who had measles in the past month.		
	Acute Lower Respiratory Tract Infection	Cough accompanied by fast breathing (more than 50 per minute) or chest indrawing.		
INFANTS 6-11 mos.	WITH ANY OF THE ABOVE HIGH-RISK CONDITION		100,000 IU	GIVE ONE HALF (1/2) 200,000 IU VIT. A CAPSULE
POST PARTUM MOTHERS	All post partum mothers in highly endemic areas; post partum mothers of infants with low birth weight (less than 2500 gm), ruling out mothers who are heavy smokers and drinkers.		200,000 IU+	GIVE ONE (1) 200,000 IU VIT. A CAPSULE WITHIN ONE MONTH ONLY AFTER EACH DELIVERY OF CHILD.

\* Precaution: DO NOT GIVE THIS DOSAGE TO PREGNANT WOMEN TO AVOID TERATOGENIC EFFECTS TO THE FETUS.

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CONSULTATIVE MEETING ON VITAMIN A SUPPLEMENTATION

January 20, 1989  
8:30 - 12:00 Noon  
PICC Function Room A

P R O G R A M

- |   |  |
|---|--|
| 1. INTRODUCTION OF PARTICIPANTS   | MRS. CARMENCITA FLORES<br>Supervising Nutritionist<br>Nutrition Service, DOH     |
| 2. OVERVIEW OF CONSULTATIVE CONFERENCE<br>(OBJECTIVES, RATIONALE, MECHANISM)  | MRS. ADELISA C. RAMOS<br>Chief, Nutrition Service, DOH                           |
| 3. VITAMIN A DEFICIENCY IN THE PHIL.  | DR. EVA O. SANTOS<br>Institute of Ophthalmology<br>UP-PGH                        |
| 4. PRESENTATION OF RESULTS OF<br>"TOLERANCE OF PRESCHOOLERS TO TWO<br>DOSAGE STRENGTHS OF VITAMIN A<br>PREPARATION" | DR. RODOLFO FLORENTINO<br>Director, FNRI   |
| DISCUSSION/REACTIONS  | PARTICIPANTS   |
| 5. PRESENTATION OF POLICY<br>RECOMMENDATIONS<br>DISCUSSION/REACTIONS  | DR. CONSUELO ARANAS<br>Asst. to the Undersecretary<br>for Public Health Services |
| 6. SYNTHESIS  | DR. MANUEL ROXAS<br>Undersecretary for Public<br>Health Services                 |

OVERALL MODERATOR: DR. ELVIRA DAYRIT,  
Chief, MCH

VITAMIN A DEFICIENCY PREVENTION AND CONTROL PROGRAM  
IN THE PHILIPPINES

FIVE YEAR DIRECTIONAL PLAN (1989-1993)

PREPARED BY THE NUTRITION SERVICE, DOH  
FEBRUARY 1989

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## EXECUTIVE SUMMARY

Vitamin A deficiency is one of the "Gang of Four" most important types of malnutrition in the Philippines, along with protein-energy malnutrition, iron and iodine deficiency disorders. The major cause of vitamin A deficiency is prolonged inadequate dietary intake. Against a background of poverty and general malnutrition, recurrent infections are common precipitating factors, with measles emerging as an exceptionally severe threat to vitamin A status.

Preventing blindness in children has itself powerful emotional appeal. Recent evidence shows the equally sinister, and far more prevalent, results of poor vitamin A status leading to decreased resistance to infection and inevitably reduced chances of survival. The paradox is that for the last twenty years at least we have had the knowledge, the research base and most of the technical apparatus to deal with this disastrous condition. Control technologies are low cost and safe.

This document reinforces the urgent need to take action to prevent and control vitamin A deficiency in the Philippines. It maps out a multipronged strategy including short, medium and long-term solutions which have demonstrated effectiveness to reduce vitamin A deficiency. The interventions outlined in this 5-year directional plan provide a comprehensive package of services to ensure immediate impact and sustained results.

The first chapter of this document analyzes the vitamin A deficiency problem in the Philippines, its magnitude, consequences and causes. The second chapter discusses possible interventions and research findings to substantiate their effectiveness. The third chapter provides a report of the status of vitamin A programs in the country today and identifies areas necessary for improvement. The fourth chapter constitutes the plan for the next 5 years to prevent and control vitamin A deficiency. It outlines the major interventions, key activities, essential inputs, expected outputs and a timeframe for the implementation of each intervention. The fifth and final chapter of this document identifies major policy issues which will require decisions and guidance from the highest ranks of the Department of Health (DOH).

This 5-year directional plan puts an urgent call to action into a rational and systematic framework for implementation. Upon approval and endorsement by the DOH Executive Management Committee, it is intended to serve as an overall guide to DOH vitamin A efforts for the next 5 years.

## 1.0 THE VITAMIN A DEFICIENCY PROBLEM IN THE PHILIPPINES

### 1.1 MAGNITUDE

Vitamin A deficiency (VAD) is one of the major nutritional problems in the Philippines. Its occurrence is well documented. Over the last decade the problem has persisted in the country at levels two to three times higher than the WHO critical level (signaling a problem of public health significance). The nationwide nutrition survey conducted by FNRI in 1982 reported a xerophthalmia prevalence rate of 3.5% among preschoolers. Previous studies conducted by the NCP in Metro Manila, Cebu and Marinduque reported prevalence rates between 3.9% and 4.4% during the early 1980's. Most recently, in 1987, the DOH found rates of 4.0% and 3.6% among preschoolers in Antique and slums of Las Pinas. Xerophthalmia prevalence statistics are based on clinical cases of xerophthalmia. These represent severe vitamin A deficiency, which constitute only the "tip of the iceberg". (A summary of prevalence survey results is presented in Annex 1).

Subclinical data, such as vitamin A serum levels, show even higher rates of vitamin A deficiency mostly among infants, preschoolers, pregnant and lactating mothers. The results of a 1986 FNRI survey in selected regions of the Philippines found rates as high as 33% among infants, 15% among preschoolers, 21% among pregnant and lactating mothers in some regions. (see annex 2 for table comparing regions)

WHO classifies the Philippines as "Class 1" by degree of public health significance of vitamin A deficiency, xerophthalmia and nutritional blindness. Clearly, the high magnitude of VAD in the Philippines warrants a comprehensive program to prevent and control its occurrence.

### 1.2 CONSEQUENCES

Vitamin A deficiency is the major cause of childhood blindness in the Philippines. Blindness is one of the most serious disabilities from which an individual can suffer and constitutes a great social and economic burden for the community. It is estimated that 350,000 preschoolers suffer from xerophthalmia each year in the Philippines. About 10% of these children or roughly 38,500 will have corneal damage. Of these children, it is estimated that between 15,000 and 19,000 go blind each year. (see annex 3 for table on consequences of xerophthalmia in the Philippines).

In addition to blindness, recent evidence shows the equally sinister, and far more prevalent, results of poor vitamin A status leading to decreased resistance to infection and inevitably reduced chances of survival. Severe vitamin A deficiency is associated with high mortality, usually more than 25% in hospitalized cases. (Blegvad, 1924). The rate may be as high as 60% in children under two years of age (McLaren, 1965). Vitamin A deficiency is not the sole cause of death as protein-energy malnutrition and infections are almost always present.

A large study in Indonesia reported that children with mild VAD have a mortality rate of 4-8 times higher than children with no apparent deficiency. (Sommer, 1982) It was also reported that children with mild or moderate vitamin A deficiency were more susceptible to acute respiratory infections and diarrhea, the two top killers of Filipino children (Sommer, 1984).

Preventing blindness in children has itself powerful emotional appeal, and is sufficient ground for mounting a program to prevent VAD. Blindness resulting from VAD is a tragedy, since it is so easily preventable. Moreover, the recent evidence associating vitamin A deficiency with increased child morbidity and mortality, makes the urgency to prevent this deficiency even greater.

### 1.3 CAUSES OF VITAMIN A DEFICIENCY

The major cause of vitamin A deficiency is prolonged inadequate dietary intake. (see table on dietary intake of vitamin A in the Philippines in Appendix 4) Against a background of poverty and general malnutrition, recurrent infections are common precipitating factors, with measles emerging as an exceptionally severe threat to vitamin A status.

Conditions which lead to low dietary intake, interference with absorption and utilization, and rapid loss of vitamin A put individuals at greater risk for vitamin A deficiency. Dietary intake is affected by food availability, infant and child feeding practices, and the appetite of individuals. Absorption and utilization of vitamin A are influenced by the consumption of dietary oil; the presence of diarrhea, and the presence of protein for transporting vitamin A. Recurrent infections, particularly measles and respiratory infections, lead to the rapid loss of vitamin A.

Young children constitute the most vulnerable group and the most serious eye lesions commonly occur in them. This is related to their relatively high vitamin A requirements for growth, increased needs due to the frequent occurrence of infections, a low intake from milk of undernourished mothers, and failure to supplement carotene-poor staples with dark green leaves and other rich sources.

## 2.0 POSSIBLE INTERVENTIONS TO SOLVE THE VITAMIN A PROBLEM

### 2.1 POSSIBLE INTERVENTIONS

### RESEARCH FINDINGS

#### Vitamin A Supplementation

##### A. Case Finding/Treatment of Xerophthalmia Cases:

Eliminates nightblindness, reduces Bitot's spots, and reverses or terminates corneal destruction when given early enough to children with xerophthalmia (Sinha and Bang, 1976).

Detection of nightblindness and Bitot's spots can easily be taught to health volunteers and health personnel.

##### B. Prophylactic Supplementation

When given as prophylaxis, shown to have 87-90% prophylactic efficacy against Bitot's spots and nightblindness among children (Swaminathan, MC, et. al., 1970).

50% reduction in in-hospital pediatric measles mortality (Harclaya, A., 1987).

34% reduction in childhood mortality in children 1-6 years of age (Sommer, A., 1986), although these findings await further confirmation from other studies.

Studies have shown that children with even mild vitamin A deficiency are at 2 to 3 times increased risk of respiratory disease and diarrhea (Sommer, A. et al 1984), than those who have been given vitamin A supplementation. This association, however, requires further confirmation.

WHO/UNICEF JOINT STATEMENT: "It is appropriate to advise countries mounting high dose vitamin A programmes for the control of xerophthalmia that reduction of childhood mortality is a reasonable expectation and is further justification for such programmes" (ACC/SCN 1986).

## Fortification:

### A. Sugar:

Reduced significantly the number of children with serious vitamin A deficiency. Provided general improvement in vitamin A plasma levels including breastmilk levels. However, cost-recovery mechanisms failed. (Arroyave, G., 1981).

### B. MSG:

Significant reduction in xerophthalmia prevalence, increased breastmilk and plasma vitamin A levels, and increased Hb levels in children (Tarwotjo, 1985).

## Agricultural Production:

Households with small gardens have less nightblindness and 1/3 the rate of corneal disease as households without. (Cohen, N., 1985).

Home gardens of 4 by 4.5 meters can provide adequate amounts of vitamin A rich foods for a family (AVRDC Garden Program, 1986).

Xerophthalmic children do not consume adequate quantities of green leafy vegetables, even though the families of the children consume GLVs daily. Availability is a necessary, but not sufficient, condition. (Eastman, 1987)

## Nutrition Education:

Education can help promote the adoption of low-cost and cost-free practices (Hornick, R. 1985). The potential for nutrition education to impact on vitamin A status is promising considering that green leafy vegetables are available, but most children are not consuming adequate amounts (DOH, 1988).

Social Marketing Campaign undertaken in Iloilo demonstrated that dietary behavior can change significantly using nutrition education (Manoff, 1979)

Improvement in frequency use of GLVs and reduction in RDA deficit (Devadas, 1983).

### Breastfeeding Promotion:

Breastfeeding status is a powerful predictor of risk of nutritional blindness. The risk of developing one or more of the eye signs or symptoms of vitamin A deficiency was six times higher for a child under two not being breastfed. (Cohen, N., 1986).

### Measles Immunizations

Measles precedes as many as 25 to 50% of the cases of corneal xerophthalmia in Asia (Sommer, et.al. 1980c).

Children with a history of recent measles were 11 times more likely to develop severe corneal xerophthalmia than those in the general population (Sommer, A., 1982).

Measles has been associated with xerophthalmia in Africa (Sauter, 1976), Indonesia (Sommer, 1982) and Denmark (Bloch, 1921). Diseases such as measles influence the requirements for vitamin A by altering absorption efficiency, the rate of tissue metabolism, or the efficiency of utilization. (IVACG, 1979)

### Control of Diarrheal Diseases (CDD):

Absorption of vitamin A is impaired during acute gastroenteritis to only 30-70% (Sivakumar and Reddy, 1972). Control of diarrheal diseases would help in vitamin A absorption.

Most studies show an association between chronic diarrhea and xerophthalmia. While some studies have shown that vitamin A deficiency increases the risk of diarrheal disease, this awaits further confirmation.

### Control of ARIs

Absorption of vitamin A impaired during episodes of ARI, but mechanism not yet understood. Studies show that only 30-70% of vitamin A is absorbed by children with respiratory infections vs. 95% in normal children (Sivakumar and Reddy, 1972).

### General Nutrition Programs

Clinical signs of vitamin A deficiency (xerophthalmia) are almost always accompanied by generalized malnutrition (Bloch, 1924; ten Doesschate, 1972; Oomen, 1961; Brown et al., 1979), and stunting and wasting (Sommer, 1982).

Malabsorption, depressed synthesis of retinol-binding protein (RBP) and other derangements of vitamin A metabolism may occur (IVACG, 1981).

Dietary fat is necessary for the metabolism and absorption of carotenoids (provitamin A) and vitamin A in the intestines.

### Treatment of Intestinal Parasites

Higher rates of parasitic infections found in children with xerophthalmia (Patwardhan, 1969).

Malabsorption of vitamin A associated with giardiasis (Chavelittamrong et al., 1980), ascariasis (Mahalanabis et al., 1979).

## 2.2 INTERVENTION PROFILE OF SELECTED COUNTRIES

<u>COUNTRY</u>	<u>ESTIMATED XEROPHTHALMIA PREVALENCE</u>	<u>INTERVENTION PROGRAMS</u>
INDONESIA	1.0%	<ul style="list-style-type: none"> <li>* NUTRITION EDUCATION (SOCIAL MARKETING)</li> <li>* UNIVERSAL VITAMIN A SUPPLEMENTATION (200,000 IU)</li> <li>* MSG FORTIFICATION WITH VITAMIN A</li> <li>* PUBLIC HEALTH SERVICES (CDD, EPI, ARI)</li> <li>* RESEARCH (GLV PROMOTION, ORT &amp; VIT. A)</li> </ul>
INDIA	>2.0%	<ul style="list-style-type: none"> <li>* UNIVERSAL VITAMIN A SUPPLEMENTATION (200,000 IU)</li> <li>* NUTRITION EDUCATION</li> <li>* FEEDING OF AT RISK CHILDREN</li> <li>* HEALTH EDUCATION</li> </ul>
SRI LANKA	0.6%	<ul style="list-style-type: none"> <li>* MEDICAL VITAMIN A SUPPLEMENTATION (4,000)</li> <li>* DISTRIBUTION OF FORTIFIED FOOD SUPPLEMENT "THRIPOSHA" TO PREGNANT WOMEN AND LACTATING MOTHERS</li> <li>* NUTRITION EDUCATION (TV, RADIO POSTERS)</li> </ul>
BANGLADESH	>4.5%	<ul style="list-style-type: none"> <li>* UNIVERSAL VITAMIN A SUPPLEMENTATION (200,000 IU)</li> <li>* NUTRITION EDUCATION (SOCIAL MARKETING) TO PROMOTE COVERAGE OF VAC AND CONSUMPTION OF GLVS</li> <li>* WHEAT FORTIFICATION (BEING INVESTIGATED)</li> </ul>
VIETNAM	0.9%	<ul style="list-style-type: none"> <li>* INTERVENTION PROGRAM IN PLANNING STAGE</li> </ul>
PHILIPPINES	3.5%	<ul style="list-style-type: none"> <li>* SMALL PILOT PROJECTS IN VITAMIN A SUPPLEMENTATION AND NUTRITION EDUCATION.</li> <li>* PUBLIC HEALTH SERVICES (CDD, EPI)</li> </ul>

1.8 - XN

1.4 - X1B

## 2.3 INTERVENTION STUDIES AND FINDINGS OF SELECTED COUNTRIES

LOCATION	INTERVENTION STUDY	FINDINGS
INDIA	CASE DETECTION AND TREATMENT OF XEROPHTHALMIA CASES WITH LARGE DOSE VIT. A	ELIMINATION OF NIGHTBLINDNESS, REDUCTION OF BITOTS SPOTS, ARREST OF CORNEAL DAMAGE
	UNIVERSAL VAC SUPPLEMENTATION FOR PREVENTION	80% EFFICACY IN PROTECTING AGAINST BITOTS SPOTS AND NIGHTBLINDNESS. (Source?)
INDONESIA	MSG FORTIFICATION	SIGNIFICANT REDUCTION IN XEROPHTHALMIA AND SIGNIFICANT INCREASE IN PLASMA AND BREASTMILK VITAMIN A COMPARED WITH CONTROLS. (MUHILAL, 1985)
	UNIVERSAL VAC SUPPLEMENTATION (200,000 IU)	34% REDUCTION IN CHILD MORTALITY (SOMMER, 1983) DECREASED INCIDENCE OF ARI AND DIARRHEA AMONG CHILDREN GIVEN VAC VS. CONTROLS. (SOMMER, 1984).
TAIWAN	SCHOOL GARDENS	10X18 METER GARDEN COULD MEET 60% OF SCHOOL CHILDRENS' RDA (AVRDC, 1986)
	HOME GARDENS	4X4.5 METER GARDEN COULD MEET 80% TO 177% RDA OF AN INDONESIAN FAMILY (AVRDC, 1986).
GUATEMALA COSTA RICA HONDURAS	SUGAR FORTIFICATION	SIGNIFICANT REDUCTION IN SEVERE VAD. INCREASE IN BREASTMILK AND PLASMA VITAMIN A (ARROYAVE, 1981).
TANZANIA	200,000 IU VITAMIN A TO PEDIATRIC MEASLES CASES	50% REDUCTION IN IN-HOSPITAL PEDIATRIC MORTALITY COMPARED WITH CONTROLS.
PHILIPPINES	NUTRITION EDUCATION	INCREASE IN NUMBER OF MOTHERS ADDING OIL TO LUGAW IN ILOILO (MANOFF, 1979)

*Fortification*

*Philippine Fortification Study*

## PAST DOH VITAMIN A EFFORTS

UNICEF SUPPLIES VITAMIN A PEARLS: In the late 1970s and early 1980s, UNICEF supplied the DOH with vitamin A supplements containing vitamin A and D. These were distributed to health centers, however, health workers did not undergo training in case detection for xerophthalmia. Furthermore, the distribution was not monitored to ensure that high risk groups were receiving the supplements. These shortcomings led to the eventual discontinuation of the supplement supply.

VITAMIN A SUPPLEMENTATION STUDY IN BICOL: In 1985-86 a study to investigate the relationship between vitamin A supplementation and child mortality was initiated in Bicol. The study suffered a major setback when sensationalized reports of vitamin A toxicity surfaced creating public fears. The study was subsequently terminated.

### 3.2 CURRENT STATUS OF VITAMIN A PROGRAM AND SERVICE CAPABILITY

While there are innovative pilot programs underway in Antique and Las Pinas, as a whole, general findings include:

- \* Detection and treatment of xerophthalmia among preschoolers is not practiced as a routine part of public health services.
- \* Health workers lack the skill to detect and treat xerophthalmia cases, and the knowledge to identify the most at risk groups.
- \* Vitamin A supplements are not regularly available at the health units. When available, however, there are multiple forms of varying doses, and health workers display confusion regarding who to give the preparations to and how much to give. Most of the vitamin A preparations are insufficient to treat xerophthalmia.
- \* Nutrition education efforts generally mention vitamin A deficiency, but materials which specifically address behavioral change regarding vitamin A deficiency are inadequate. There is no intensive communication strategy aimed to combat vitamin A deficiency.
- \* There is no clear updated DOH Policy Guideline on the dose, frequency of dosing, target groups and personnel permitted to distribute vitamin A supplements.

Pilot programs begin conducted in collaboration with Helen Keller International have laid the ground work for the interventions proposed in the 5-year directional plan. These pilot initiatives include:

Integration of VAC into Existing Health Services. This project aims to develop service delivery models--one rural (Antique Province) and one urban (slums of Metro Manila)--for integrating vitamin A supplementation into PHC services. Training, logistic, supervision, monitoring and community support components have been developed and implemented. Therapeutic treatment of xerthalmic children and prophylactic intervention for "high risk" (malnourished, post-measles, ARI) children is being undertaken.

Social Marketing to Prevent VAD. This project is applying social marketing approaches to the development of interpersonal and mass media communication strategies to prevent VAD. Radio messages, posters, and pamphlets have been produced and distributed.

Vitamin A Policy Development. This project undertook a dosage and side-reaction study which is being used as a basis for developing Philippine-specific vitamin A supplementation policy recommendations.

Fortification with Vitamin A. The first phase has consisted of initiatives to catalyze the reconsideration of using MSG as a vehicle for fortification. Research reviews, opinion surveys and technical exchanges with Indonesia have been activities undertaken.

→ include policy makers as targets

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VITAMIN A SUPPLEMENTATION

A. CASE DETECTION AND TREATMENT

- \* XEROPHTHALMIA CASE DETECTION SKILLS LACKING AMONG HEALTH PERSONNEL.
- \* CASE DETECTION NOT PRACTICED AS ROUTINE PART OF PUBLIC HEALTH SERVICES.
- \* INADEQUATE SUPPLY OF VITAMIN A AVAILABLE. MULTIPLE DOSES AND VARIOUS PREPARATIONS. CAUSE CONFUSION AMONG HEALTH PERSONNEL.
- \* HEALTH PERSONNEL UNSURE WHO TO GIVE VITAMIN A SUPPLEMENTS TO AND HOW MUCH TO GIVE.

B. PROPHYLAXIS SUPPLEMENTATION

- \* SOME 2ND AND 3RD DEGREE MALNOURISHED CHILDREN ARE GIVEN VITAMIN A SUPPLEMENTS BUT THE DOSE IS NOT UNIFORM.
- \* MONITORING VAC SUPPLEMENTATION IS NOT INTEGRATED IN THE SYSTEM.
- \* NEEDED FOR APPROVED UPDATED POLICY ON FREQUENCY, DOSAGE AND STANDARD PREPARATIONS FOR SUPPLEMENTATION.
- \* PILOT PROJECT IN ANTIQUE AND LAS PINAS HAVE DEVELOPED MODELS FOR INTEGRATING VAC SUPPLEMENTATION, XEROPHTHALMIA DETECTION INTO PUBLIC HEALTH SERVICES.

NUTRITION EDUCATION

- \* LACK OF INTENSIVE NUTRITION EDUCATION STRATEGY FOR VAD PREVENTION AND CONTROL AIMED AT CHANGING DIETARY BEHAVIOR.
- \* LACK OF EDUCATIONAL MATERIALS TO MOTIVATE MOTHERS TO CONSUME GLVS.
- \* SOCIAL MARKETING PILOT PROJECT ON-GOING IN REGION VI. IT WILL PRODUCE A COMPREHENSIVE COMMUNICATION PACKAGE AIMED AT CHANGING DIETARY PRACTICES AMONG PRESCHOOLERS, PREGNANT AND LACTATING MOTHERS.

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FOOD FORTIFICATION

- \* PAST EFFORTS TO ASSESS MSG AS VEHICLE FOR FORTIFICATION NOT CONTINUED DUE TO TECHNICAL PROBLEMS. RENEWED EFFORTS TO INVESTIGATE OR CONSIDER FORTIFICATION IN THE LIGHT OF INDONESIAN MSG FORTIFICATION STUDY.
- \* COMMITMENT TO PURSUE FORTIFICATION AS A STRATEGY BY THE DOH POLICY MAKERS. NEEDS TO BE FORMALIZED

---

AGRICULTURAL PRODUCTION

- \* WEAK LINK BETWEEN THE DOH AND DA AT IMPLEMENTING LEVELS TO PROMOTE PRODUCTION OF VITAMIN A RICH FOODS.

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RESEARCH

- \* CASE-CONTROL STUDY ON VITAMIN A SUPPLEMENTATION AND PEDIATRIC MEASLES IS ON-GOING AT RITM, NCH, AND SAN LAZARO.

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PUBLIC HEALTH SERVICES

- \* CDD AND EPI PROGRAMS ARE ON-GOING
  - \* OPT AND TARGETTED FOOD ASSISTANCE ON-GOING.
-

#### 4.0 5-YEAR DIRECTIONAL PLAN (1989-1993)

**4.1 GOAL: TO REDUCE VITAMIN A DEFICIENCY, ITS ASSOCIATED BLINDNESS, MORBIDITY AND MORTALITY.**

#### 4.2 OBJECTIVES

**GENERAL: TO REDUCE THE PREVALENCE OF XEROPHTHALMIA FROM ITS PRESENT LEVEL OF 3.5% TO 1.5% BY 1993.** among preschoolers.

1982 (2-6 yr old children: XN, XI B)  
1989 (2. 1. ?)

**SPECIFIC: 1. TO PROVIDE VITAMIN A SUPPLEMENTATION TO ALL CASES OF XEROPHTHALMIA, HIGH-RISK PRESCHOOLERS, AND LACTATING MOTHERS.**

data base.

**2. TO INCREASE DIETARY INTAKE OF VITAMIN A RICH FOODS AMONG PRESCHOOLERS SO THAT 80% OF THEIR RDA WILL BE MET.**

No good data base for this 80

**3. TO REASSESS FORTIFICATION AS A STRATEGY TO PREVENT AND CONTROL VAD BY IDENTIFYING AND FIELD TESTING A VEHICLE FOR POTENTIAL NATIONAL FORTIFICATION.**

### IMPACT TARGETS

INDICATOR	1989 RATE (%RED)	1990 RATE (%RED)	1991 RATE (%RED)	1992 RATE (% RED)	1993 RATE (%RED)
XEROPHTHALMIA PREVALENCE RATE	3.2 (10%)	2.5 (20%)	2.0 (20%)	1.6 (20%)	1.3 (20%)

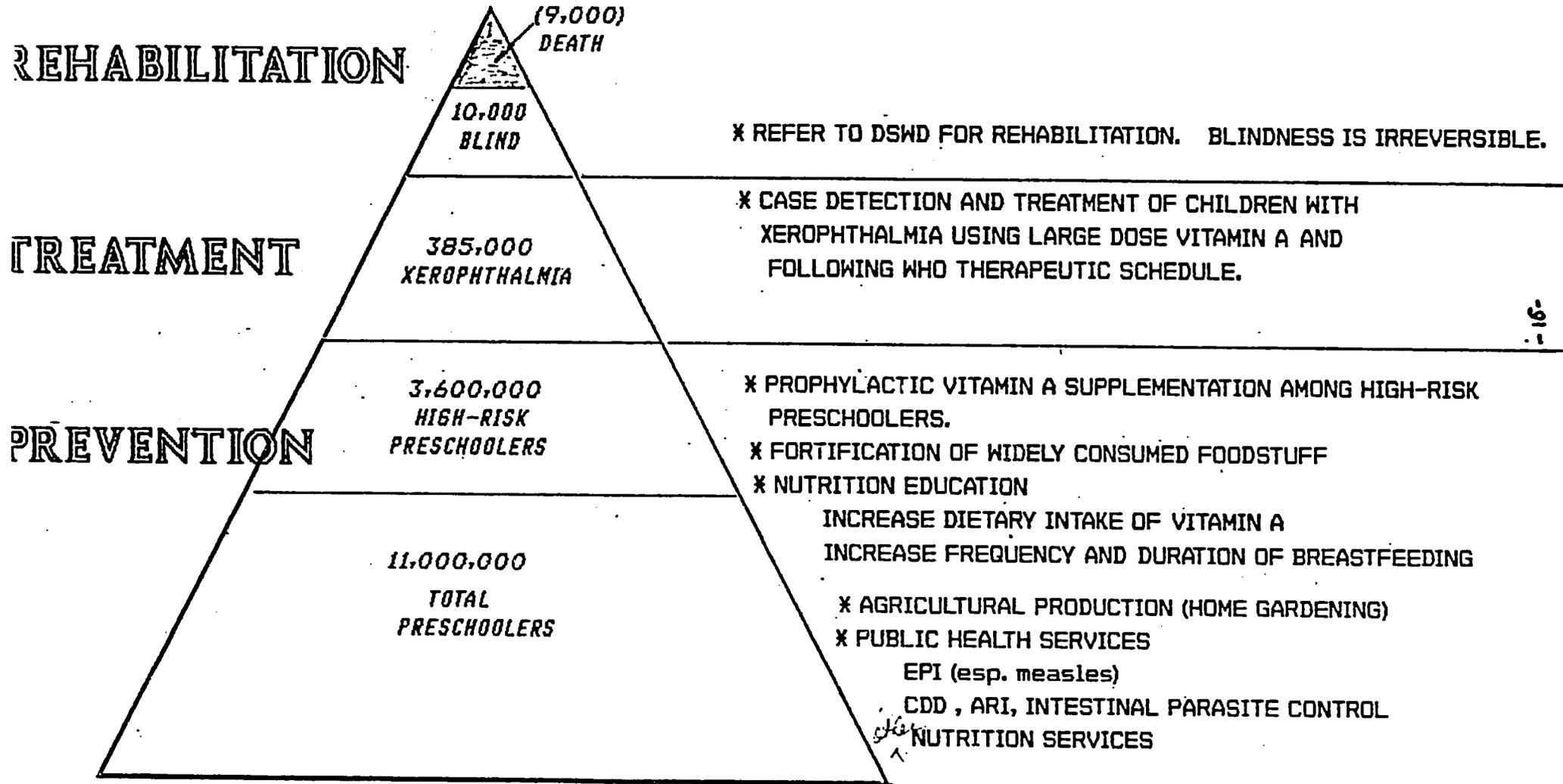
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## SECONDARY TARGETS

INDICATOR	1989	1990	1991	1992	1993
ACTIVE XEROPHTHALMIA CASES DETECTED/TREATED	10%	30%	40%	60%	80%
HIGH-RISK CASES IDENTIFIED AND GIVEN PROPHYLAXIS	10%	30%	40%	50%	60%
ADEQUATE SUPPLY OF 200,000 IU VAC PROVIDED NATIONWIDE	10%	60%	80%	100%	100%
VITAMIN A SKILLS TRNG. COVERAGE					
A) CORE TRAINORS	20%	100%			
B) IMPLEMENTORS	25%	75%	100%		
PROVINCES DISSEMINATING NUTRITION EDUCATION MESSAGES.	10%	50%	70%	100%	100%
INCREASE IN CHILDREN CONSUMING 80% OF RDA OR MORE FROM DIETARY SOURCES	10%	15%	20%	25%	30%

# 4.3 INTERVENTION FRAMEWORK

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**INTERVENTIONS PROPOSED FOR PHILIPPINE  
VAD PREVENTION AND CONTROL PROGRAM  
(1989-1993).**

<b>INTERVENTION</b>	<b>NEEDS</b>	<b>SCOPE OF PROPOSAL</b>
<b>VITAMIN A SUPPLEMENTATION:</b>  CASE DETECTION AND TREATMENT OF XEROPHTHALMIA CASES  PROPHYLACTIC SUPPLEMENTATION AMONG HIGH-RISK PRESCHOOLERS AND LACTATING-MOTHERS  <i>Post program</i>	TRAINED HEALTH PERSONNEL (XEROPHTHALMIA DETECTION, IDENTIFICATION OF HIGH-RISK GROUPS, PROPER TREATMENT AND PROPHYLAXIS)  AVAILABLE VITAMIN A SUPPLEMENTS IN STANDARD GENERIC PREPARATION  MONITORING OF SIDE-EFFECTS.  INTEGRATION OF CASE DETECTION (USC, OPT AND OTHER SERVICES)  CLEAR SUPPLEMENTATION POLICY GUIDELINES FROM DOH.	FIRST YEAR, 1 PROVINCE PER REGION. SUBSEQUENT NATIONWIDE EXPANSION.
<b>NUTRITION EDUCATION</b>	DEVELOPMENT OF COMPREHENSIVE COMMUNICATION PACKAGE ADAPTABLE TO DIFFERENT REGIONS AND FOOD PRACTICES.  HEALTH PERSONNEL TRAINED IN EFFECTIVE INTERPERSONAL COMMUNICATION TECHNIQUES.	FIRST YEAR, 1 PROVINCE PER REGION, THEN NATIONWIDE.
<b>FOOD FORTIFICATION</b>	IDENTIFICATION OF SUITABLE VEHICLE.  POLICY COMMITMENT TO PURSUE FORTIFICATION.	RESEARCH AND PILOT TESTING.
<b>AGRICULTURAL PRODUCTION</b>	HOME GARDENING	COORDINATION WITH DAF, DECS
<b>PUBLIC HEALTH SERVICES</b>	EPI, CDD ON-GOING. ARI CONTROL STARTING. OPT AND FOOD ASSISTANCE ON-GOING.	COORDINATION ONLY
<b>RESEARCH</b>	RESEARCH ON MEASLES AND VITAMIN A ON-GOING.  RESEARCH ON DOSAGE COMPLETED. NEED DATA ON BENEFIT OF 100,000 IU VS. 200,000	SUSTAIN CURRENT EFFORT.  USE TO FORMULATE POLICY.  RESEARCH

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## 5.0 POLICY ISSUES

5.1 VITAMIN A SUPPLEMENTATION (Recommendations to the following issues are included in annex 9. They are the product of a consultative meeting held with local experts, and are presented for consideration/endorsement by the DOH Executive Management Committee).

1. Treatment schedule for Xerophthalmia case: Is the dosage and dosing schedule appropriate?
2. Dose, Frequency of Dosing, and Target Groups for Prophylaxis Supplementation: Is the dose appropriate? Are the anticipated levels of side-effects acceptable? How should the side-effects be monitored? Are the target groups appropriate?
3. Procurement of Standard Preparation of Vitamin A (200,000 IU): Is the proposed preparation the best available from the standpoint of effectiveness and cost?
4. Personnel to Detect and Treat Cases and Provide Prophylactic Supplements to High-risk children: Who should be permitted to detect and treat children with xerophthalmia? Who should be permitted to detect and provide prophylaxis to high-risk children and lactating mothers?
5. Universal Distribution: What situations/conditions warrant universal distribution of vitamin A supplements to all preschool children? Who will decide if/when these conditions are present?

## 5.2 NUTRITION EDUCATION

1. Are the target markets appropriate?
2. Is the message content adequate/appropriate?
3. Is there the need for additional anthropologic/qualitative research on food practices in each region?
4. What should be the role of FIHES, and how should the NS coordinate with FIHES?
5. What mechanisms can the DOH avail of to minimize costs incurred to air radio spots, TV spots and other mass media materials?

## 5.3 FORTIFICATION

1. What is the DOH commitment to pursuing fortification as a strategy to prevent vitamin A deficiency?
2. If fortification required legislation, who and how should the proposed legislation be sought?

#### 5.4 AGRICULTURAL PRODUCTION

1. What is the best way to establish an institutional link with the Dept. of Agriculture so that coordination at the implementation level will be facilitated/encouraged?

#### 5.5 Information System, Monitoring and Evaluation

1. Is there a need for baseline surveys?
2. Does OPT data collection need to be modified? USC card? HIS form? RHU/BHS masterlists?

#### 5.6 ORGANIZATIONAL STRUCTURE

1. What is the best structure?
2. How should the program coordinate with MCH programs, other micro-nutrient deficiencies and PEM program?

#### 5.7 BUDGET

1. Are items appropriate? Are cost estimates too much? too little?

# XEROPHTHALMIA

## (CLINICAL VAD)

### RESULTS OF XEROPHTHALMIA PREVALENCE SURVEYS IN SELECTED AREAS OF THE PHILIPPINES 1976-1987

YEAR	LOCATION	PREVALENCE RATE
1976	CEBU (NCP)	4.5%
1976-82	METRO MANILA (NCP)	3.9%
1979-81	CEBU & MARINDUQUE (NCP)	4.4%
1982	NATIONWIDE (FNRI)	3.5%
1987	ANTIQUE (DOH)	4.0%
1987	LAS PINAS (DOH)	3.6%

### WHO CRITERIA SIGNIFYING PUBLIC HEALTH PROBLEM:

NIGHTBLINDNESS (XN) .....	more than 1.0%
BITOT'S SPOTS (XIB) .....	more than 0.5%
CORNEAL KEROSIS (X2) .....	more than 0.01%
KERATOMALCIA (X3A/X3B) .....	more than 0.01%
CORNEAL SCAR (XS) .....	more than 0.05%

# SUBCLINICAL VAD

## PERCENT OF LOW OR DEFICIENT SERUM VITAMIN A (RETINOL) IN SELECTED REGIONS OF THE PHILIPPINES, 1986 (FNRI)

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	<i>SOUTHERN TAGALOG</i>	<i>WESTERN VISAYAS</i>	<i>NORTHERN MINDANAO</i>
	<i>PERCENT LOW OR DEFICIENT SERUM RETINOL</i>		
<i>6 MOS. TO 1 YEAR</i>	<i>19.5</i>	<i>33.3</i>	<i>20.0</i>
<i>1 TO 6 YEARS</i>	<i>10.4</i>	<i>10.9</i>	<i>15.7</i>
<i>PREGNANT</i>	<i>7.3</i>	<i>24.1</i>	<i>7.5</i>
<i>LACTATING</i>	<i>1.4</i>	<i>21.1</i>	<i>10.0</i>
<i>TOTAL</i>	<i>6.5</i>	<i>14.9</i>	<i>15.6</i>

*ALSO, IN CEBU DURING 1973-77, 57% OF CHILDREN WERE FOUND TO HAVE  
LOW OR DEFICIENT VITAMIN A SERUM RETINOL. (SOLON).*

# DIETARY INTAKE

## DIETARY INTAKE OF VITAMIN A IN THE PHILIPPINES

YEAR	LOCATION	GROUP SURVEYED	PERCENT RDA*
1978	NATIONWIDE (FNRI)	HOUSEHOLDS	69% **
1981	NUEVA VIZCAYA (NCP)	CHILDREN	20%
1981	CEBU (NCP)	CHILDREN	66%

\* RDA = RECOMMENDED DIETARY ALLOWANCE

\*\* IN THIS SURVEY 44% OF THE HOUSEHOLDS HAD A VITAMIN A INTAKE OF LESS THAN 40% OF THE RDA.

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# CONSEQUENCES OF VAD

PROJECTED NUMBER OF ANNUAL CASES OF  
XEROPHTHALMIA, CORNEAL DAMAGE,  
BLINDNESS AND MORTALITY AMONG  
PRESCHOOLERS ASSOCIATED WITH  
VITAMIN A DEFICIENCY IN THE PHILIPPINES

(ESTIMATE IS BASED ON 1987 PHILIPPINE PRESCHOOL POPULATION)

<b>XEROPHTHALMIA</b> (3.5% OF FILIPINO PRESCHOOLERS)	<b>385,000</b>
<b>CORNEAL DAMAGE</b> (10% OF THOSE WITH XEROPHTHALMIA)	<b>38,500</b>
<b>BLINDNESS</b> (50% OF THOSE WITH CORNEAL DAMAGE)	<b>19,250</b>
<b>DEATH</b> (50% TO 70% OF THOSE WHO GO BLIND)	<b>9,000-13,000</b>

X 15.14 OUT OF 10,000 CHILDREN AGED 1-6 ARE BLINDED FROM XEROPHTHALMIA  
BASED ON A STUDY OF 1,700 PRESCHOOLERS IN CEBU (SOLON, 1978).

5 YEAR PROCUREMENT PLAN  
VITAMIN A DEFICIENCY CONTROL PROGRAM

- I. For: xerophthalmia (treatment schedule)  
Dosage: 200,000 IU VAC given at day 1, 2, 14 and then 6 months  
after: (4 capsules/child/year)

YEAR	SERVICE TARGET	RESOURCE REQUIREMENT (NO.)		ESTIMATED COST*
	1-6 YRS. OLD	CAPSULES	BOTTLES	
1989	117,458	469,832	1,940	P 176,720.00
1990	313,549	1,254,196	2,508	564,300.00
1991	240,471	961,884	1,924	519,480.00
1992	171,506	686,024	1,372	451,388.00
1993	104,956	419,824	840	331,800.00

- II. For: a) 3rd and 2nd degree PEM (prophylaxis schedule)  
b) Post partum  
Dosage: a) 200,000 IU VAC given every 6 months:  
2 caps/children/year  
b) 200,000 IU VAC given only once upon birth

YEAR	SERVICE TARGET		RESOURCE REQUIREMENT (NO.)		ESTIMATED COST*
	3RD & 2ND DEGREE 1-6 YRS. OLD	POST PARTUM MOTHERS	CAPSULES	BOTTLES	
1989	125,224	198,620	449,068	898	P 168,824.00
1990	359,869	500,420	1,220,158	2,441	549,225.00
1991	430,008	511,718	1,371,734	2,744	740,880.00
1992	465,887	523,035	1,454,809	2,910	957,390.00
1993	493,640	534,603	1,521,883	3,043	P1,201,985.00

III. Summary Table: Total cost by year

YEAR	RESOURCE REQUIREMENT		TOTAL ESTIMATED COST
	CAPSULES	BOTTLES	
1989	918,900	1,838	P. 345,544.00
1990	2,474,354	4,949	1,113,525.00
1991	2,333,618	4,668	1,260,360.00
1992	2,140,833	4,282	1,408,778.00
1993	1,941,207	3,883	1,533,785.00

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\* 1989 Cost/bot. = \$8.54 (c/o UNICEF) = P188.00  
Additional 20% every year after 1989 to cover inflation

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VAC REQUIREMENT BY YEAR

YEAR	AREA	ELIGIBLE POPULATION (1-6)	TARGET NO. BY GROUP			CAPSULE REQ'T. (200,000 IU)	ESTIMATED COST*
			XEROP. CASES	3RD & 2ND DEGREE	POST PARTUM		
1989	REGION 6	944,449	33,056	39,287	45,220	256,018	P 320,022
	NCR	1,320,604	18,488	15,694	63,230	168,570	210,712
	TARGETTED 12 PROV.	1,883,243	65,914	70,243	90,170	494,312	617,890
	TOTAL		117,458	125,224	198,620	918,900	P1,148,624
1990	ALL REGIONS	10,451,622	313,549	359,869	500,420	2,474,354	3,958,966
1991	- DO -	10,687,596	240,471	430,008	511,718	2,333,618	4,667,236
1992	- DO -	10,923,964	171,506	465,887	523,035	2,140,833	5,566,165
1993	- DO -	11,165,559	104,956	493,640	534,603	1,941,707	6,407,632
	TOTAL		947,940	1,874,628	2,268,396	9,809,412	P21,748,623

\* Cost includes freight and handling from central office to field health offices.

Unit Cost = P1.25

Table 3. VAD TRAINING PLAN

YEAR	LEVEL OF TRAINING	TRAINORS*	PARTICIPANTS	EMPHASIS AREA	NO.	VENUE	SCHEDULE	ESTIMATED COST
1989	NATIONAL	CONSULTANTS	NAVACG		11	TAGAYTAY CITY	APRIL	P 25,000.00
	REGIONAL	NAVACG	RPVACG	REGION 1-12 CAR 1 PROV./REGION	52	ZAMBOANGA CITY	JULY	217,900.00
	PROVINCIAL	RPVACG NAVACG	PHO/HOSP. STAFF DIST. TRAINORS : MHO/HD	- DO -	428	RESPECTIVE PROVINCE	AUG. - SEPT.	383,800.00
	DISTRICT	RPVACG DISTRICT NAVACG	IMPLEMENTORS: ALL RHM's	- DO -	2,280	BY DISTRICT	SEPT. - NOV.	1,750,400.00
	BARANGAY	DISTRICT RPVACG	BHW's	- DO -	15,960	BY MUNICIPALITY	OCT. - DEC.	4,788,000.00
						<b>TOTAL</b>	P 7,165,100.00	
1990	REGIONAL	NAVACG RPVACG	PROVINCIAL	REMAINING PROV. (58)	304	BY REGION (RHTC)	FEB. - MARCH	225,467.00**
	PROVINCIAL	RPVACG NAVACG	DISTRICT	- DO -	2,012	RESPECTIVE PROVINCE	MARCH - MAY	1,679,323.00**
	DISTRICT	RPVACG DISTRICT NAVACG	IMPLEMENTORS: RHM	- DO -	9,025	BY DISTRICT	APRIL - JULY	5,050,128.00**
	BARANGAY	DISTRICT RPVACG	BHW's	- DO -	63,175	BY MUNICIPALITY	MAY - SEPT.	18,952,500.00**
						<b>TOTAL</b>	P25,907,418.00	

\*COMPOSITION:

1. NATIONAL VITAMIN A CORE GROUP (NAVACG)
  - NUTRITION SERVICE STAFF: 4
  - ANTIQUÉ PHO STAFF : 3
  - NCR STAFF : 2
  - HKI : 2
  - TOTAL** : 11
2. REGIONAL-PROVINCIAL VITAMIN A CORE GROUP (RPVACG)
  - CHIEF, REGIONAL TRAINING CENTER
  - SUPERVISING NUTRITIONIST
  - MEDICAL SPECIALIST (PHO)
  - DIETARY NUTRITIONIST
3. DISTRICT TRAINORS  
MHO's/Head of Unit

\*\*Does not include transportation of national trainers.

Table A.  
**TARGET PROVINCES FOR 1989 VAD TRAINING BY REGION**

REGION	PROVINCE	NO. OF MUNICIPALITIES
1	PANGASINAN	48
2	KALINGA APAYAO	15
3	NUEVA ECIJA	32
4	QUEZON	40
5	CAMARINES SUR	35
6	CAPIZ	17
7	BOHOL	47
8	NORTHERN SAMAR	23
9	ZAMBOANGA SUR	40
10	SURIGAO NORTE	26
11	SURIGAO SUR	19
12	SULTAN KUDARAT	11
CAR	ABRA	27
6	AKLAN	31
	ILOILO	47
	GUIMARAS	5
NCR	NEGROS OCCIDENTAL	31
	DISTRICT 1	3
	DISTRICT 2	3
	DISTRICT 3	2
	DISTRICT 4	3
	4 CITIES	



# VAD UPDATES



ISSUE NO. 2

JULY TO SEPTEMBER 1988

A QUARTERLY PUBLICATION OF THE NUTRITION SERVICE  
ON THE VITAMIN A PROGRAM

DEPARTMENT OF HEALTH, SAN LAZARO COMPOUND, STA. CRUZ, MANILA

## Vitamin A Deficiency: A Cause of Concern

### The Problem

Vitamin A deficiency (VAD) is one of the prevalent deficiency problems in Southeast Asia, parts of South America and Africa. In Southeast Asia, 5 to 10 million children are affected yearly by xerophthalmia, the clinical eye manifestation of VAD. Of these 500,000 develop serious corneal involvement and 250,000 become blind.

In the Philippines, 3.5% of the estimated 11 million Filipino preschool children have xerophthalmia, 10% of whom are corneal related cases. Fifty percent of those with corneal damage become blind and 70% of whom may die within a few months after becoming blind. (See table below)



Estimated VAD Cases in the Philippines

	1987 Estimated Philippine Level*	Estimate based on WHO critical level**
Children with xerophthalmia (3.5% of 11 million Filipino preschool children)	385,000	165,000
Corneal related cases (10% of those with xerophthalmia)	38,500	16,500
Children who become blind each year (50% of those with corneal damage)	19,250	8,250
Children who die each year (70% of those who go blind)	13,475	6,187

Over the last decade VAD has persisted in the Philippines at levels two to three times higher than the WHO critical level.

\* Estimates are based on xerophthalmia prevalence rates determined during the 1982 FNRI Nationwide Nutrition Survey, which are as follows: 1.8% for nightblindness, 1.4% for Bitot's spot, and 0.3% for Bitot's spot and nightblindness combined. To obtain the estimates, the total xerophthalmia rates of 3.5% was applied to the 1987 projected preschool population in the Philippines of 11 million.

\*\* Estimate based on WHO critical level of 1.0% for nightblindness and 0.5% for Bitot's spot applied to the 1987 projected preschool population in the Philippines of 11 million.

- As far back as 1976, surveys conducted in Hagonoy, Pandacan and Bambang documented levels of 2.3%.

- The Nutrition Center of the Philippines found rates of 4.4% in Cebu and Marinduque (1979-1981) and 3.9% in Metro Manila (1976-1982).

- The Nationwide Nutrition Survey of the Food and Nutrition Research Institute documented a national prevalence rate of 3.5% in 1982.

- Rates as high as 8-20% have been documented in the hyperendemic areas such as Bicol in 1983 and upland communities in Antique in 1987.

- Most recent surveys undertaken by the Department of Health in 1987 in Las Piñas and Antique indicate rates of 3.6% and 4.0% respectively.





# VAD UPDATES



ISSUE NO. 3 & 4

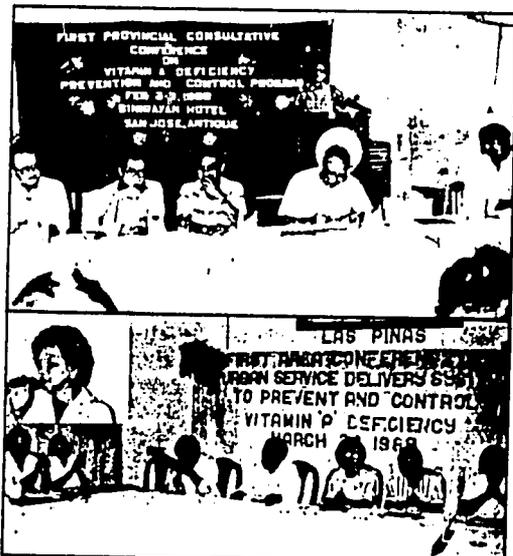
DECEMBER 1988/MARCH 1989

A QUARTERLY PUBLICATION OF THE NUTRITION SERVICE  
ON THE VITAMIN A PROGRAM

DEPARTMENT OF HEALTH, SAN LAZARO COMPOUND, STA. CRUZ, MANILA

## FIRST CONSULTATIVE CONFERENCE ON VITAMIN A HELD IN ANTIQUE AND LAS PIÑAS

Two consultative conferences on Service Delivery (SD) Project for the Prevention & Control of Vitamin A Deficiency were conducted separately in Antique & Las Piñas, the SD pilot areas. The conferences were held February 2 & 3 in San Jose, Antique and March 30 in Las Piñas, Metro Manila.



Dr. Florentino Solon, Executive Director of NCP discusses the global experiences on Vitamin A deficiency during the consultative conference in Antique (above); Dr. Iluminada Ocampo (inset) presents the status and analysis of the Urban Vitamin A Service Delivery Project during the conference in Las Piñas (below).

The conference aimed to review the accomplishments of the VAD project after eight months of implementation, identify issues/problems and factors affecting the project, and develop measures to improve project implementation and management.

Both conferences had as speaker Dr. Florentino Solon, Executive Director of the Nutrition Center of the Philippines. He discussed the safe use of vitamin A and shared global experiences on vitamin A deficiency.

Dr. Prudencio Ortiz, Region VI Health Director and Dr. Rodolfo Garfin, Provincial Health Officer of Antique presented the Vitamin A Project Update in Region VI and the Overview and Update of Vitamin

A Project in Antique, respectively. Project status were presented by the district health officers, namely, Dr. Nelly Abiera (Dao District), Dr. Justo Rios (San Jose District), Dr. Julito Osunero (Sibalom District), Dr. Romeo Agraviador (Culasi District), and Dr. Conrado Pador (Pandan District). Accomplishments of other agencies in Antique were reported by Mr. Aurelio Tating, Division Superintendent, Department of Education, Culture and Sports; Mr. Diosdado Magbanua, Provincial Agricultural Officer, Department of Agriculture; Ms. Antonietta Escalona, Provincial Social Welfare Officer, Department of Social Welfare and Development; and Mr. Eugenio Moscoso, Provincial Nutrition Action Officer, Provincial

(Con't. on page 7)

## AKLAN, LA CARLOTA CHOSEN OUTSTANDING SM TASK FORCES

The Social Marketing (SM) Task Forces of Aklan Province and La Carlota City have been chosen outstanding SM Task Forces in Region 6, the pilot area of VAD prevention strategies.

In the plaque of recognition handed by Regional Director Prudencio Ortiz during the Regional Conference at the Amigo Hotel in Iloilo City last April 19, Secretary Bengzon cited both task forces for their "organization, dedicated conduct of planned activities, and creative health education toward the prevention of Vitamin A Deficiency through the social marketing process."

The decision was made by the Regional Office after a thorough evaluation of accomplishments of each provincial and city health office in the Region. Among all provinces in the Region, Aklan has been able to finish within five months the VAD Orientation Campaign throughout the province from management levels down to the Rural Health Unit and Barangay Health Worker levels.

Each winner likewise received a cash prize of P1,000.00 from Mrs. Adelisa Ramos, Chief of the Department of Health's Nutrition Service. ●

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# Mga Bukas Pa...

ISANG HAPON, KUMUNSA SI TRINING SA KOMADRONA SA BARANGAY HEALTH CENTER...



MABUTI KUNG GAWON. PERO KUNG LUGAW ANG IBINIBIGAY MO HUWAG MONG KALILIMUTANG LAGYAN NG MADAHONG BERDENG GULAY TULAD NG MALUNGGAY.



Room S-367, Third Floor, PICC Secretariat Bldg., CCP Complex  
Roxas Blvd., Manila, Philippines Tel.: 8320309 Loc. 7545 & 7758 Fax: (63-2) 831-4860

ENGLISH DIALOGUE  
POSTERIZED COMICS

**TITLE: THERE'S STILL TOMORROW**

One afternoon, Trining went to consult with the midwife at the health center

**TRINING:** Good afternoon, Flora  
**MIDWIFE:** What do you want, Trining?  
**TRINING:** I'd like you to take a look at my son, Nando. He appears weak.  
**MIDWIFE:** How old is he? What do you feed with him?  
**TRINING:** He is six month old. I breastfeed him and give him rice gruel at times.  
**MIDWIFE:** That's all right. But when you give him rice gruel, don't forget to add green leafy vegetables.  
**TRINING:** I'd like to. Because I know that green leafy vegetables are rich in Vitamin A. But I'm scared that he might suffer from indigestion.  
**MIDWIFE:** That won't happen if you feed him properly. Here's what you should do:  
Get two tablespoonfuls of green leafy vegetables from the cooked dish. Mash the leaves thoroughly. Don't forget to add a little oil. Then mix with the rice gruel.  
**TRINING:** I'll try that one of these days.  
**MIDWIFE:** No, Trining. You should do that daily. I mean the feeding of green leafy vegetables. Because they're rich in Vitamin A that can prevent sickness. And according to the Doctor, if you don't feed your child with green leafy vegetables everyday, your child might become blind one day.  
**TRINING:** I'll follow your advice so that my son won't go blind and would grow up healthy.

**GIVE YOUR CHILD GREEN LEAFY VEGETABLES EVERYDAY.  
THEY CONTAIN VITAMIN A AND PROVIDE GOOD HEALTH.**

**A MESSAGE FROM THE DEPARTMENT OF HEALTH**

# Si Toto ang Pag-asa ng Bayan

SANG HAPON... SI ALING KOMADRONA AY NAPABISITA SA KANYANG KUMARE



O KUMARENG METRING... KUMUSTA KANA?

AY, KUMARE, NABISITA KAYO?



PAPUNTA SANA AKO SA HEALTH CENTER NG MAISIPAN KONG DUMAAN MUNA...

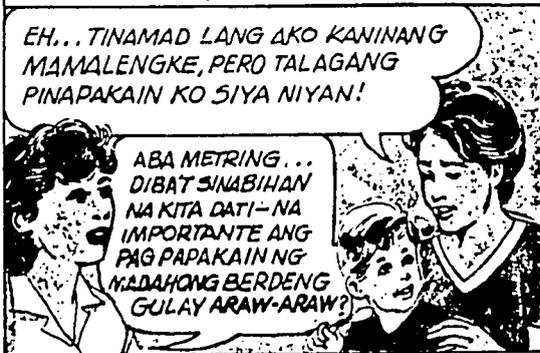
HI NINANG!



ANO BA ANG KINAKAIN MO, TOTO?

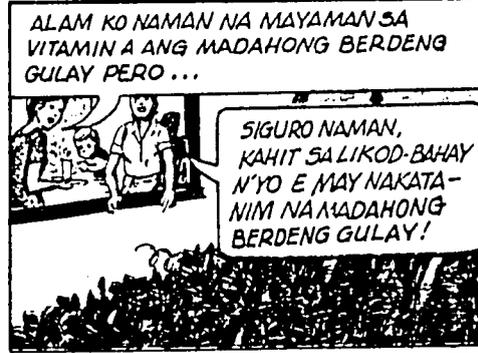
ETO PO... KONTING KANIN, ISDA AT GULAY...

PERO MUKHA YATANG WALANG MADAHONG BERDENG GULAY...



EH... TINAMAD LANG AKO KANINANG MAMALENGKE, PERO TALAGANG PINAPAKAIN KO SIYA NIYAN!

ABA METRING... DIBAT SINABIHAN NA KITA DATI-NA IMPORTANTE ANG PAG PAKAKAIN NG MADAHONG BERDENG GULAY ARAW-ARAW?



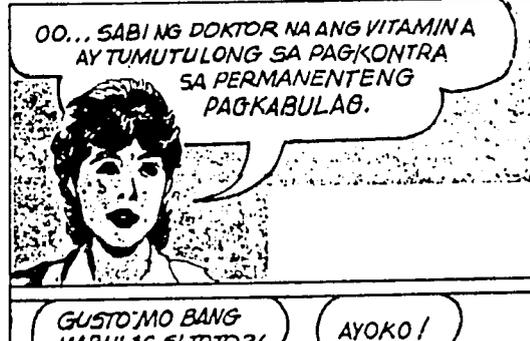
ALAM KO NAMAN NA MAYAMAN SA VITAMIN A ANG MADAHONG BERDENG GULAY PERO ...

SIGURO NAMAN, KAHIT SA LIKOD-BAHAY N'YO E MAY NAKATANIM NA MADAHONG BERDENG GULAY!



HINDI MO BA ALAM NA PAG HINDI MO INARAW-ARAW ANG PAGPAPAKAIN NIYAN E... MAARI SIYANG MABULAG?

ANO ???!



OO... SABI NG DOKTOR NA ANG VITAMIN A AY TUMUTULONG SA PAGKONTRA SA PERMANENTENG PAGKABULAG.

GUSTO MO BANG MABULAG SI TOTO?!

AYOKO!



ENGLISH DIALOGUE  
POSTERIZED COMICS

TITLE: TOTO IS THE HOPE OF THE NATION:

One afternoon, the midwife visited her neighbor:

MIDWIFE: Hi Marina, how are you?  
MARINA: Flora, it's a good thing that you dropped by.  
MIDWIFE: I was on my way to the health center and I decided to drop by.  
TOTO: Hi, Godmother.  
MIDWIFE: Well Toto, what are you eating?  
TOTO: A little rice, fish and vegetables.  
MIDWIFE: But I don't see any green leafy vegetables.  
MARINA: Oh, I wasn't able to go to the market today.  
MIDWIFE: Marina, haven't I told you before, it is important that you feed Toto with green leafy vegetables.  
MARINA: I know that green leafy vegetables are rich in Vitamin A but...  
MIDWIFE: You might have some planted in your backyard. Didn't you know that if you don't do that daily, Toto might just go blind.  
MARINA: What!!!  
MIDWIFE: That's right. The doctor says that Vitamin helps prevent blindness. Would you want Toto to go blind?  
MARINA: Certainly not!  
MIDWIFE: And Vitamin A helps fight other sicknesses too.  
MARINA: Wouldn't Toto find it boring to be eating green leafy vegetables everyday?  
MIDWIFE: But you can vary your cooking so that he won't get bored. You can mix it with chicken. Or even add them to your beans. But don't forget to add a little oil.  
MARINA: Thanks a lot for your advice.  
MIDWIFE: Anytime for Toto. He might even be our hope for the future.

GIVE YOUR CHILD GREEN LEAFY VEGETABLES EVERYDAY.  
THEY CONTAIN VITAMIN A AND PROVIDE GOOD HEALTH.

A MESSAGE FROM THE DEPARTMENT OF HEALTH

ANNOUNCER : One day.

CHILDREN : (OFF MIKE, TEASINGLY) Junior's nose drips,  
Junior's nose drips

EDNA : Lita, I don't know what to do with my  
Junior.

LITA : Why Edna?

EDNA : He has persistent colds. And he doesn't  
want to eat green leafy vegetables daily.

LITA : How do you cook these green leafy  
vegetables?

EDNA : I mix them all together.

LITA : If you do that everyday, he will surely  
get tired. Vary it. Try cutting patsay  
leaves in small pieces and mix them in  
sardines. Or malunggay leaves mixed with  
fresh anchovies.

EDNA : Let me try that.

MUSIC BRIDGE

LITA : How is it now Edna. Does Junior eat green  
leafy vegetables daily already?

EDNA : Yes, everyday. Now, his playmates don't  
tease him around anymore.

LAUGHTER

ANNOUNCER : EVERYDAY. HALF-A-CUP OF GREEN LEAFY  
VEGETABLES. WITH VITAMIN A. FOR HEALTHY  
CHILDREN. A reminder from the Department  
of Health.

STINGER

**RADIO SPOT (ENGLISH TRANSLATION)**  
**30 Seconds**

**ANNCR** : One day at the Health Center

**SFX** : Baby crying, women talking

**TRINING** : Madame Midwife, my son Nando always seems sickly. What should I do?

**MIDWIFE** : What do you feed him with?

**TRINING** : Other than my own milk, I give him rice gruel. You see, he is already five months old.

**MIDWIFE** : Not just rice gruel. Mix it with mashed green leafy vegetables. Such as kangkong, petsay, or malunggay. And add a little oil. Do that everyday and you'll see. Nando will be as healthy as you want him to be.

**MUSIC BRIDGE**

**MIDWIFE** : Trining, how's Nando now?

**TRINING** : He's just like Fernando Poe now.

**LAUGHTER**

**ANNCR** : Everyday. Half-a-cup of green leafy vegetables. With Vitamin A. For Healthy Children. A reminder from the Department of Health.

**STINGER**

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A MONITORING STUDY OF THE SOCIAL MARKETING PROJECT  
FOR THE PREVENTION AND CONTROL OF VITAMIN A  
DEFICIENCY IN WESTERN VISAYAS

A Final Report  
Submitted to  
The Department of Health

FELY P. DAVID

SOCIAL SCIENCE RESEARCH INSTITUTE  
Central Philippine University  
Iloilo City

April 1989

# SOCIAL MARKETING OF VITAMIN A



Manoff International Inc.

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**MANOFF GROUP INC.**

THIS CONSULTANCY WAS CONDUCTED UNDER A SUBCONTRACT WITH HELEN KELLER  
INTERNATIONAL.

Consultant Trip Report: Philippines  
January 30-February 6, 1989

PROMOTION OF VITAMIN A-RICH FOODS  
AND SUPPLEMENTS IN THE PHILIPPINES

by:

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Research Director

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 JSE a John Snow, Inc. affiliate

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APPENDIX A: PERSONS CONTACTED

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## OVERVIEW

This was The Manoff Group's third consultancy assignment with Helen Keller International and the Nutrition Service in the Philippines. The first 2-week assignment in February 1988 was intended to help HKI and the Nutrition Service in designing the social marketing project for the promotion of vitamin A-rich foods and supplements, listing all the steps involved and preparing a skeleton of each step envisaged.

The second assignment in May 1988, involved helping HKI and the Nutrition Service to analyze the findings from the formative research conducted by them and to interpret the data meaningfully to lead to the formulation of the communications strategy. A detailed report on the findings was written during this trip. A written brief was prepared for the selected advertising agency (J. Romero and Associates) and the agency was also given a personal briefing.

Over the last six months, HKI and the Nutrition Service have been working with the advertising agency (and sometimes with other resources) to develop the required communications package and to implement it. The program was launched in the middle of September.

The primary objective of this assignment was to help HKI and the Nutrition Service in designing a monitoring study to assess the functioning of the program and develop guidelines for the future. Apart from this, I also had the opportunity to:

- o Work with the advertising agency on the development of some new materials;
- o Review the baseline study conducted by the Central Philippines University.

## CHRONOLOGICAL SUMMARY OF THE ACTIVITIES

- January 30: Discussions with HKI, Nutrition Service and J. Romero and Associates to understand the current status of the project.
- January 31-February 2: Visit to Region VI to develop the instruments for the monitoring study, pre-test them in Aklan and brief the Central Philippines University for conducting the study. The visit was also utilized to review the baseline study conducted by the same organization.
- February 3-6: Working with J. Romero and Associates and final discussions with HKI and Nutrition Service.

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## STATUS OF THE PROJECT

Based on the findings of the formative research, two radio spots of 30 seconds each were developed by J. Romero and have been aired by 9 radio stations with a frequency of 4-8 times every day. These have been the only mass media materials developed so far.

To aid the interpersonal communications efforts of the Barangay Health Workers and the Rural Health Midwives, a special "teaching poster" was designed and introduced through a program of training in each province.

Other materials developed are a "primer" to solicit support for the program and a set of stickers and "fliers" used selectively.

It was quite apparent that the materials created so far are inadequate and do not constitute a comprehensive and cohesive campaign utilizing all possible means of communication. It was felt by all that new materials are required for a more effective execution of the communications strategy.

Also, HKI and the Nutrition Service decided to seek resources other than J. Romero and Associates for the development and production of print materials. The slowness of the agency in understanding the needs of the job and responding with solutions was stated to be the major reason for this decision. Additionally, the decision was governed by a need to cut the costs by utilizing cheaper services. However, in the process the quality appeared to have suffered, so everyone was open to the idea of approaching the agency again for seeking further inputs.

## BRIEFING THE ADVERTISING AGENCY

It was decided, therefore, to open a dialogue with the agency to seek their services and take up the basic ideas explored during the formulation of the communications strategy and try to implement them. The agency appeared to be happy to do this. Because of a misconception that HKI and Nutrition Service did not have any more money for further materials, the agency had not been proposing any additional inputs.

To start with, two of the ideas discussed earlier were revived:

- o use of "comics" to communicate the message;
- o use of other direct access communication media such as billboards, posters at sari-sari stores and stickers for bicycles.

The agency was briefed on both of these areas and agreed to present its basic ideas within a few days.

## COMICS

It is known that comics enjoy a fair degree of popularity among the mothers, even in the rural areas. Use of comics to communicate the messages was an integral part of the planned communications strategy.

There seemed to be two alternative ways of tapping the potential of the comics:

- o To produce an entire comic strip and to print it for distribution;
- o To buy advertising space in existing comic labels to put in our messages.

The agency had so far proceeded only with the first alternative, and there appeared to be confusion about how exactly to implement it. However, it appeared that the second alternative of buying space in existing labels would be cheaper and more feasible. The agency, therefore, was asked to develop an "advertisement" insert, to be put into the comics which communicated the message in the "comic format." The agency was also briefed on the precise content of the message and the characters required, on the basis of which it was decided that it will need to be a two-page "advertisement".

The agency agreed to develop one of these strips for the target audience of 1 - 6 year old children. It was agreed that subsequent to this, similar strips could be developed for the other two target segments of under-1 year olds and pregnant and nursing mothers.

It was also felt that this two-page "comic strip" printed separately, could be used in several other ways - for instance, posted in an enlarged form at Barangay Health Stations and Rural Health Centers or distributed to school children.

The agency also agreed to explore the "costs of reach" of the "comics" media in the region as well as other options of utilizing the idea.

## OTHER MATERIALS FOR DIETARY INTERVENTIONS

The agency was also asked to develop an idea to be used in posters, stickers, and billboards. It was felt that there should be one uniform idea with a common visual and words, so that the target audience receives a consistent and reinforcing message from all the sources.

It was felt that this has to be a very simple idea that connects daily feeding of green leafy vegetables with good health, presented in an attractive manner.

## MATERIALS TO SUPPORT VITAMIN A CAPSULE DISTRIBUTION

None of the materials developed so far is intended to support the capsule distribution program in Antique. It was felt that the agency should be asked to do some work on this.

Two types of materials were identified for this:

- o two radio spots, one supporting each "eligibility condition" for the capsules (signs of vitamin A deficiency or other indicators of vulnerability such as a recent attack of measles or diarrhea or malnourishment).
- o A poster to be used in schools, with an effort to muster up support from the school children to identify the eligibility "cases" and to promote capsule utilization for these.

The agency agreed to work on these and make a presentation to the client on February 6.

## THE MONITORING STUDY

### The Rationale

A need was felt to undertake a research study to monitor the working of the efforts put in so far. Basically, these efforts have been the two radio spots and the training of the Barangay Health Workers and the Rural Health Midwives. The findings are expected to generate guidelines for corrective action in these two inputs. The key questions the study should answer are:

- o To what extent are the radio spots reaching the mothers?
- o Is a rescheduling of broadcast times or stations required to ensure wider reach?
- o Are the spots being recalled by the mothers? Are they memorable enough?
- o Is the main message getting through?
- o Is the main message found credible?
- o Are the spots motivating and encouraging the mothers to follow the advice?

- o Are there any resistance points, not covered by the spots, which are preventing the mothers from following the advice.
- o Has the training of the BHW (Barangay Health Workers) and RHM (Rural Health Midwives) been conducted?
- o What has been the participation level?
- o What has been the comprehension of the participants of the training content?
- o Do the participants recall having been trained on how to use the "teaching poster"?
- o What is the participants' reaction to the "teaching poster"?
- o Have the participants' been using the "teaching poster"?
- o What is their experience in using the "teaching poster"?
- o How have they been using it? How often? Where? When? In groups or individually?
- o Have they faced any problems in using the "teaching poster"?
- o What has the mothers' reaction been to the "teaching poster"?

#### THE DESIGN

It was decided that the study needs to be diagnostic in nature, collecting in-depth information to aid in deciding on the corrective action. It was, therefore decided to use a qualitative study using in-depth interviews. The coverage of areas and respondents will not be very large.

Overall, two provinces will be covered (Iloilo and Capiz/Aklan). The total sample size will be around 150. As the BHW/RHM training has not been completed in all the areas, it would be advisable to restrict the study to municipalities where the training has been completed.

Apart from mothers, the BHWs and RHMs will also be interviewed. For the sample of mothers, in each barangay the sample should be equally divided between those who own a radio and those who do not.

#### IMPLEMENTING AGENCY

HKI and the Nutrition Service feel that the Central Philippines University, who conducted the baseline study for the project, is an

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appropriate organization to undertake the study. Hence, while in Iloilo we also took the opportunity to meet Ms. Felly David, the principal researcher who has implemented the baseline study.

Ms. David was briefed about the objectives of the study, the envisaged design, and the scope and also given the question guides which we used in the preliminary field visit. Ms. David appeared enthusiastic to do the study. Mr. Vergilio Perrito from the HKI and she discussed the administrative details for the assignment.

#### PRELIMINARY FIELD VISIT

On February 1 we visited two barangays in New Washington municipality of the Aklan province of Region VI. The objective of the visit was to try to get a first-hand understanding of what is happening in the field, both with a purpose of making the basic decisions about the kind of monitoring which is required and to pre-test the draft question guides.

Our investigations indicated that the radio-owning mothers have been reached by the spots. Most could also recall the key message, but not one characters or the situations portrayed. However, it appeared doubtful that all the resistances were being diluted and that the mothers were being motivated by the spots. The monitoring study should investigate this in detail.

The non-radio owning mothers did not appear to be touched by the efforts, as the BHW/RHM inter-personal communications, perhaps, still to be fully implemented, and no other direct channel is being tapped.

#### THE REVIEW OF THE BASELINE STUDY

During this visit, I also had an opportunity to discuss the baseline study with Ms. Felly David from CPU (Central Philippines University).

It seems that a few problems have crept in the design and implementation of the study, and hence the findings will need to be studied in the context of these observations.

1. Firstly, the sequencing of questions. The questionnaire first deals with variables relative to exposure and then addresses behavior and attitudes. This could have biased the responses to the questions pertaining to behavior and attitudes. For instance, the questionnaire first has questions about ways to feel a child to prevent blindness, exposure to messages about vitamin A and then questions the mother about whether she knows about vitamin A. Also as some linkage of vitamin with green leafy vegetables is bound to exist, mentioning vitamins before the feeding questions would bias the answers about child feeding.
2. Many of the questions appear to be "leading questions." For instance:

- o It has been asked directly whether the mother uses oil to cook the food/feed the child, rather than asking how she cooks the food and deriving the information from there.
  - o Another question asked is, "do you feel that the child needs green leafy vegetables everyday?" Clearly, the natural tendency would be to answer in the affirmative.
3. The questions pertain to children in general, and are not related to specific age groups.
  4. Sampling has been done with pre-stratified parts of the population - e.g. the type of province, the type of municipality, etc. However, the data have not been weighed to generate the picture applicable for the entire Region VI.

It seems clear that these factors could have been responsible for some inaccuracy. Particularly the nature and the sequencing of the questions would have led to reporting of a 'better' than actual behavior and attitudes. However, clearly now there is no possibility of making the changes in the questionnaire, as the final evaluation survey will need to follow the same questionnaire. Still, some modifications in the analysis could help in better utilization of the data available:

- o The data on behavior should be reported first in the report, followed by the data on attitudes and knowledge. The data on exposure should be reported in the end. (Currently, the exposure data is presented first.)
- o Knowledge and attitude scores as derived by the researchers should exclude "oil improves the taste of food." It is certainly not an "absolute truth" and not the only way/attitude which would encourage the mother to add oil to the child's food.
- o Basic behavior scores should be prepared, to be compared with similar scores at the end of project:
  - o % of mothers who give green leafy vegetables (GLVs) to the child.
  - o % of mothers who give green leafy vegetables to the child everyday.
  - o % of mothers who give at least 1/2 cup of green leafy vegetables to the child everyday.

These indicators should be constructed separately for different age groups of children (0-1 year, 1.1-2 years, 2.1-6 years).

- o Simple cross-tabulations on profile variables, knowledge and attitudes should be done to see what distinguishes mothers with desirable behavior from those with less than desirable behavior. Multivariate analysis should also be performed to further enrich the information. This information should be utilized to fine-tune the efforts of the program.

#### NEW MATERIALS PRESENTED BY J. ROMERO AND ASSOCIATES

On February 6, J. Romero and Associates presented the new materials they were briefed on. My impressions on each of these are mentioned here:

##### Comic

Two comic scripts were presented - one meant for mothers of 1-6 years old children and the other targeted at mothers of younger children. Both the scripts appeared to have been well done and addressed the relevant resistance points for the appropriate target group. The situations shown and the characters portrayed also appeared to be realistic. A few modifications were suggested in some dialogues, and the agency agreed to incorporate them. The agency will now go ahead and produce the final "comic strips" with the pictures. It is my feeling, that the comics have a substantial potential as message carriers and should be exploited as best as possible.

Given the costs of buying space in comics and the extraordinarily high spillage likely in other regions, perhaps, the actual release of these strips in the comics should be limited. Only a few labels, which are likely to be of interest to the mothers should be bought, and the reach monitored in the field. However, the same creative work can be exploited in a lot of other ways, as mentioned earlier in the report.

##### Poster

The agency was briefed on the development of a poster communicating the very basic message in an interesting, attractive, and memorable manner. This design can also be adopted for stickers, billboards and other such media, so that the target audience gets a uniform message from many reinforcing sources.

The agency presented an attractive layout, depicting a healthy, playful child and a big bunch of green leafy vegetables. Though this was considered attractive, it was felt that an alternative design with a child eagerly eating green leafy vegetables should also be explored. The agency will work out this alternative also, and the choice can be made by seeking the mothers' reactions to both.

The main message in the poster translated as "Remember - Feed green leafy vegetables to your child every day. The reward is good health." Though it does communicate the essential message, it was felt that more attractive and catching alternatives for expressing the same message should

be explored. This is necessary, as it is intended to make this as a common element in all our messages, so that the entire package works cohesively.

#### Radio Spots to Support Vitamin A Distribution

The agency had produced two draft scripts - one which talked about utilization of vitamin A capsule for night blindness and the other for other vulnerable target audiences (e.g. malnourished children or those with a recent attack of diarrhea or measles). The major comments on these are:

- o We need to ensure that the mother understands that the vitamin A mentioned here is the same as the one we have been talking about as existing in green leafy vegetables. These spots also should make reference to vitamin A being found in GLVs.
- o A modified form of the universal slogan (which will occur in all our communications) should also appear with these spots in the end.
- o The first spot should mention that nightblindness could finally ever lead to blindness.
- o The second spot mentions that "when the child recovers from diarrhea/measles, he is weak as he lacks vitamin A." It is strictly not true. What we can say is that "child recovering from diarrhea/measles needs more vitamin A than usual. Hence apart from feeding GLVs everyday, he also needs this capsule."

The agency will revise the spots based on these observations and submit revised scripts to HKI/Nutrition Service.

#### Poster for Schools

A need was felt to develop a poster to be used in schools, to motivate them to identify children with a need for the capsule. The poster presented by the agency does not seem to meet the need, as it is just a modified version of the "eye-signs" poster already available with the client. A few points need to be considered while developing this poster:

- o Firstly, it should provide knowledge to the school children about all the major aspects of vitamin A which are relevant to their action. Otherwise, it may raise a lot of questions in their minds which the teachers may not be able to answer correctly.
- o Secondly, this poster should be in conjunction with an orientation given to the teachers, so that they can use it to talk to the children. Just sticking the posters in the school will not suffice.

It seems apparent that some new thinking needs to be done on this, to be able to decide on the appropriate material for this purpose.

In summary, it is apparent that the greatest need now is to launch this complete package of materials in the field as soon as possible. A possible plan for this could be:

Posters/Billboards: should be finalized and put in the field immediately. Should be sustained until the end of the program.

Radio Spots: The two existing radio spots can be run until March. Efforts should be made to produce revised spots by that time, with a common binding element at the end (which could be in the form of a jingle or in the authoritative voice of a doctor). At least two spots should be produced, one for over 1-year olds and the other for younger children. The two comic strips produced for these two target groups can serve as the basis for their development.

If budget permits, a third spot should be produced directed at pregnant and nursing mothers.

Another idea which can be considered is to take out the reference to oil from each of these spots and produce a fourth spot on providing higher oil usage for the entire family, with specific emphasis on younger children.

The findings of the monitoring study should also be utilized as an input to the development of these spots.

Comic Scripts : Attempts should be made to try to release the two prepared scripts in selected labels as soon as possible.

Another script can be prepared for pregnant and nursing mothers.

The strips should also be printed separately for distribution among school children.

Large blow-ups of the strips can be produced and put up at Rural Health Centers and Barangay Health Stations.

APPENDIX A  
PERSONS CONTACTED

APPENDIX A

PERSONS CONTACTED

1. Mr. Rolf D. W. Klemm, Country Director, HKI (Helen Keller International)
2. Mr. Vergilio Perrito, Project Manager  
Ms. Maria Socorro
3. Ms. Chorle Ignacio, Nutrition Service
4. Mr. Aries Africa, J. Romero and Associates
5. Ms. Felly David, Central Philippines University

TABLE I

COST ANALYSIS. PRINTED/GRAPHIC MATERIALS  
SOCIAL MARKETING (JANUARY - JUNE, 1989)

MATERIAL	QUANTITY	PRODUCTION COST *	DISTRIBUTION COST	DEVELOPMENT COST	TOTAL COST	COST PER** BENEFICIARY
1. KOMIKS-HANDBILLS (3)	90,000	43,200.00	1,500.00	12,738.25	57,438.25	0.02
2. POSTER-KOMIKS (2)	4,000	29,560.00	2,500.00	8,384.80	40,444.80	0.014
3. POSTER-KOMIKS (1)	2,000	15,000.00	1,700.00	4,194.75	20,894.75	0.007
4. DISPLAY POSTER	11,000	27,500.00	-	18,152.59	45,652.59	0.016
5. STICKER 1	3,000	12,000.00	300.00	300.00	12,600.00	0.005
6. STICKER 2	5,000	13,750.00	300.00	1,519.80	15,569.80	0.008
7. FLIER	40,000	12,000.00	300.00	200.00	12,500.00	0.004
8. T-SHIRT 1	300	12,000.00	300.00	200.00	12,500.00	0.004
9. T-SHIRT 2	100	4,500.00	300.00	-	4,800.00	0.001
10. BILLBOARDS	3	18,000.00	-	200.00	18,200.00	0.006
		187,510.00	7,200.00	45,890.19	240,600.19	

N.B. Quantity and Production costs do not include materials for PEC Bicol and SD-Urban.

\* In Philippine peso. Exchange rate is P21.50 = \$1.00

\*\* Expressed in US dollars.

TABLE II  
 COST ANALYSIS. RADIO EXPENDITURES  
 (JANUARY - JUNE 1989)

COST ITEM	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	TOTAL
Airtime	87,400.00	64,400.00	64,600.00	91,000.00	108,700.00	114,600.00	530,700.00
Production				24,400.00	73,000.00		97,400.00
Development				2,000.00	2,000.00	2,000.00	6,000.00

COST/BENEFICIARY = 0.23 in US Dollars.

MEMORANDUM OF AGREEMENT 160

APPENDIX 21

KNOW ALL MEN BY THESE PRESENTS

This Memorandum of Agreement entered into by and between:

The REPUBLIC OF THE PHILIPPINES through the DEPARTMENT OF HEALTH, with office address at San Lazaro Compound, Rizal Avenue, Sta. Cruz, Manila, represented by Undersecretary of Health for Public Health Service, MANUEL G. ROXAS, M.D., and hereinafter referred to as the Party of the First Part;

- and -

HELEN KELLER INTERNATIONAL, INCORPORATED, a non-profit, non-governmental private organization based in New York City, United States of America and represented in this agreement by ROLF D.W. KLEMM, HKI-PHILIPPINES Country Director, with postal address at Room S-367, Third Floor, PICC Secretariat Building, CCP Complex, Roxas Boulevard, Manila, and hereinafter referred to as the Party of the Second Part;

- and -

CECILIA A. FLORENCIO, Ph.D., Professor of Nutrition, Department of Food Science and Nutrition, University of the Philippines, Diliman, Quezon City, hereinafter referred to as the Party of the Third Part, representing a group composed of researchers from four campuses of the University of the Philippines system;

W I T N E S S E T H

WHEREAS, one of the developing priorities of the Party of the First Part is the reduction of the prevalence of vitamin A deficiency and its associated blindness, morbidity and mortality among preschool children of the Philippines;

WHEREAS, the Party of the First Part has recently formulated and approved a 5-year Directional Plan to address the problem of Vitamin A Deficiency, and has identified as one of its strategies the re-examination of food fortification, the first step of which is the conduct of a food consumption survey;

WHEREAS, Party of the Second Part is providing requested financial assistance and collaborating with the Party of the First Part in supporting the research herein referred to;

WHEREAS, Party of the Third Part being known for her expertise on the subject covered by the problem mentioned above, has been selected by the Party of the First Part, to be the Principal Investigator of the study on "Dietary Intake and Consumption of Vitamin A Fortifiable Foods";

WHEREAS, the objectives of the study to be undertaken by virtue of this Memorandum of Agreement are as follows:

1. To know the consumption level and frequency of intake of potentially fortifiable foodstuffs frequently consumed by preschoolers as the primary target group and pregnant and lactating mothers, as a secondary target group;
2. To know the characteristics of the foods eaten (brand and packet size);
3. To know the purchasing pattern, usage and storage of the food by household;
4. To know the attitude and the community view toward the food;
5. To know the consumption level of natural vitamin A of preschoolers originating from their daily food;
6. To describe the socio-economic background of the target groups and the health and nutrition services availed of by them.

NOW, THEREFORE, for and in consideration of the foregoing premises and mutual covenants hereinafter set forth, the parties hereto have agreed, as they hereby agree, jointly undertake the study entitled, "Dietary Intake and Consumption of Vitamin A Fortifiable Foods," and to abide by the following participation, functions and responsibilities.

I. ACTIONS AND RESPONSIBILITIES

- A. The Party of the First Part, (DOH), shall:
  1. Review and approve the study protocol;
  2. Direct Regional, Provincial, City and Hospital health personnel to provide necessary support and assistance for successful conduct of the study;
  3. Review the results of the study within the context of the Department's Directional Plan to Prevent and Control Vitamin A Deficiency, and make recommendations based on the study findings to DOH policy makers;

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4. Designate a representative who will serve as the DOH coordinator to the study.
  5. Monitor the project.
- B. The Party of the Second Part (HKI), shall:
1. Provide the funding for the study through the DOH and the financial accounting structure for the release and reporting of HKI funds used for the study, in consultation with the Project Director.
- C. The Party of the Third Part, shall:
1. Serve as principal investigator of the study, and provide primary leadership in, and responsibility for, all aspects of the study;
  2. Provide one mid-term progress report on the study and submit a final report of the study findings to the DOH;
  3. Present the findings of the study before the DOH Program Managers and/or Executive Management.

COOPERATIVE NATURE OF THE AGREEMENT BETWEEN THE PARTIES

II. FUND RELEASE

- A. Upon the signing of this Memorandum of Agreement, the Party of the Second Part shall release 50% of the budget to the principal investigator.
- B. Upon the first liquidation to the Party of the Second Part, another 30% shall be released to the principal investigator.
- C. After the second liquidation, another 15% will be released to the principal investigator.
- D. Upon submission of final report, the remaining 5% shall be released to the principal investigator.

III. ADDITIONAL CLAUSES

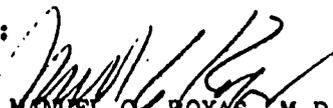
- A. The parties hereby reiterate their commitment to abide by the mutual covenants herein set forth and to bring as much of their resources as may be necessary to bear upon the problem that may have set out to address in order to ensure the accomplishment of these study goals and activities which are within the preview of this Agreement.
- B. The Proposal for the study, "Dietary Intake and Consumption of Vitamin A Fortifiable Foods" attached hereto as Annex A, shall form an integral part of this Agreement.
- C. This Agreement shall take effect on the date of signature of parties hereto and shall remain in force until January 31, 1990.

IN WITNESS THEREOF, the parties have hereunto affixed their signature this 3rd day of July, 1989, in Manila, Philippines.

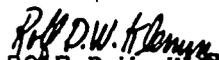
DEPARTMENT OF HEALTH

HELEN KELLER INTERNATIONAL

By:

  
MANUEL G. ROXAS, M.D.  
Undersecretary of Health

By:

  
ROLF D.W. KLEMM 7/28/89  
Country Director

*C. Florencio*  
CECILIA A. FLORENCIO, Ph.D.  
Professor of Nutrition  
University of the Philippines

WITNESSES

  
ADELISA C. RAMOS, M.P.H., MPA  
Chief, Nutrition Service  
Department of Health

  
ELLEN E. VILLATE  
Program Manager  
HKI/Philippines

A C K N O W L E D G M E N T

REPUBLIC OF THE PHILIPPINES } S.S.  
CITY OF MANILA

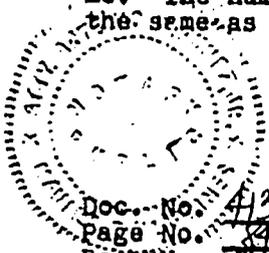
Before Me, this 2nd day of August, 1989, in the City of Manila, personally appeared:

1. MANUEL G. ROXAS, M.D., with residence certificate No. CONF 742 issued on 1/5/89 at San Juan, MM

2. ROLF D.W. KLEMM, with residence certificate ACP - No. E 34740 issued on \_\_\_\_\_ at Manila, Philippines and EXPIRY DATE - Oct. 13, 1989

3. CECILIA A. FLORENCIO, PH.D., with residence certificate No. AR 560359 issued on 3/7/89 at QC

All known to me and to me known to be the same persons who executed the foregoing Memorandum of Agreement, consisting of five (5) pages including, the page on which the acknowledgment is written, each and every page thereof being signed by the parties executing it and their witnesses and sealed with notarial seal; and said parties acknowledged to me that same is their free and voluntary act and deed. The residence certificate of the parties were exhibited to me. The numbers, dates and places of issue thereof being the same as those indicated above.



Doc. No. 43  
Page No. 4  
Book No. 11  
Series of 1989

NOTARY PUBLIC

ATTY. ARTEMIO W. RUZ, JR.  
NOTARY PUBLIC  
UNTIL DECEMBER 31, 19 89  
MANILA PHILIPPINES  
PTR NO. 118800-0 19 89  
TAN 5267-DO-236-A-1

DIETARY INTAKE AND CONSUMPTION OF  
VITAMIN A FORTIFIABLE FOODS

( A PROJECT PROPOSAL )

APPENDIX 2a

## Background and Objectives

Vitamin A deficiency (VAD) is recognized as a significant public health problem in the Philippines. In 1987, it was estimated that the national prevalence of VAD exceeds the WHO critical level by two to three times.

National health authorities have identified four strategies to prevent and/or control VAD. These are nutrition education, agricultural production, vitamin A supplementation and food fortification. As early as 1973, an evaluation was made of the relative effectiveness of different intervention strategies to control VAD. It was reported (Solon, et al., 1979) that MSG (monosodium glutamate) fortification was the only intervention that resulted both in a significant reduction in clinical signs of xerophthalmia and in a significant rise in serum vitamin A levels among those studied in the province of Cebu. In a subsequent study in three provinces, the researchers (Solon, et al., 1984) claimed that "this Philippine study has demonstrated the biological effectiveness of MSG fortification". A re-examination of this study has raised serious questions about the validity of such a conclusion (Florenco, 1988). In any case, the study identified a number of technical and operational problems which have to be taken into account if MSG fortification is to be pursued. It appears that Indonesia has made significant progress in addressing some of these difficulties. Moreover, research conducted in that country point to the beneficial effects of vitamin-A fortified MSG on vitamin-A status (Muhilal, et al., 1988) and child health and survival (Muhilal, et al., 1988).

The Department of Health recently formulated a five-year plan to address the problem of VAD in the Philippines. Part of the plan is an attempt to re-examine the worthiness of food fortification. As an initial

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step, a food consumption survey will be undertaken. The survey will have the following objectives, as stipulated by the Department of Health and Helen Keller International (Philippines).

1. To know the consumption level and frequency of intake of potentially fortifiable foods frequently consumed by preschoolers as the primary target group and pregnant and lactating mothers as a secondary target group in areas endemic for vitamin A deficiency
2. To know the characteristics of the foods used (brand and packet size)
3. To know the purchasing pattern, usage and storage of the food by household
4. To know the attitude and the community view toward the food
5. To know the consumption level of natural vitamin A of preschoolers originating from their daily food
6. To describe the socio-economic background and health and nutrition services

## Methodology

### I. Variables and their definition

The following key factors are to be included in the survey.

- A. **Dietary intake:** kind and amount of all foods eaten in a day by the household and target household members. This includes the consumption of foods prepared at home, bought or given and meals taken outside the home, as revealed by a 24-hour food recall, taken for three consecutive days.
- B. **Nutrient intake:** amount and adequacy of energy, protein and vitamin A present in the daily diet, based on the three-day recall of food intake.
- C. **Consumption of potentially fortifiable foodstuff:** daily amount consumed of specific foodstuffs identified as having a good potential for vitamin-A fortification, on the basis of household-level criteria<sup>a</sup> (availability, affordability and eaten by target groups).  
The data will be obtained from the food recall and foodstuff inventory, using weighing method, and will be cross-checked against the sales record of local "sari-sari" stores.
- D. **Consumption of vitamin-A rich foods:** kind, amount and frequency of foods rich in vitamin A eaten in a day and a week. Data will be based on food recall and food frequency list, which will take into account seasonal variations.
- E. **Purchasing and usage pattern:** information describing the purchase (what, where, when, how much, how often, at what cost) and usage (how used, when, with what, how often) of potentially fortifiable foods.
- F. **Socioeconomic status (SES):** this will include data on family size, income, occupation, education, age and gender, physiological status and household facilities (such as water source).
- G. **Preschool children:** children one to four years old.
- H. **Pregnant and lactating women:** females who are pregnant or nursing a child, regardless of month of gestation or lactation, respectively.

<sup>a</sup>The other selection criteria to be addressed in subsequent studies are those outside the household, such as technological considerations.

## II. Study site and subjects

The survey will be carried out in four provinces (study areas) representing the following groups: farming, fishing, industrial workers and urban slum dwellers. In each province, one municipality and two to three villages in the municipality will be chosen on the basis of their being the most depressed<sup>b</sup> and having the highest prevalence of malnutrition among preschool children.<sup>c</sup>

After choosing the villages, a complete enumeration will be made of the total number of households with pregnant women, lactating mothers and/or 1 to 4 year old children. A minimum sample size of 150 households per study area will be targetted, to make a total of at least 600 households in the four provinces. The respondents will be the mothers. They will be requested to provide data about the household in general and household members who are pregnant, lactating or 1 to 4 years of age.

## III. Data collection, processing and analysis

Prior to the actual data collection period, the usual preliminary activities will be conducted. These will include the establishment of linkages at all administrative levels; preparation, pretesting and finalization of instruments and procedures; and training of data collectors.

Each chosen household will be visited three times. On Day One, there will be (a) an interview using a pre-coded questionnaire on SES and purchasing and usage pattern of potentially - fortifiable foodstuff (PFF), (b) first day food recall and (c) beginning inventory of PFF (in a sub-sample). On Day Two, the second day food recall will be

<sup>b</sup>Based on the list of the Department of Local Government and Department of Social Welfare.

<sup>c</sup>A proxy indicator, in the absence of village-based data on prevalence of VAD.

taken, together with the administration of a pre-coded form on frequency of intake of vitamin A rich foods. On Day Three, there will be (a) third day food recall, (b) an interview using a pre-coded questionnaire on opinion/perception about the PFF and (c) ending inventory of PFF. It is estimated that each household visit will take about 1½ to 2 hours at least.

In addition to household visits, additional data on PFF - purchase will be collected, using a record of actual purchases of PFF of a sub-sample of households. The necessary arrangements will be made with the owners of market stalls or sari-sari stores where the households buy their PFF.

Local Food Composition Tables and the Philippine Recommended Dietary Allowances will be used to estimate the nutrient content of the foods eaten and the nutritional adequacy of the diet.

Data will be processed using either the SPSS or SAS computer program. They will be analyzed for the whole sample, by province (occupational group) and by respondent group (pregnant/lactating women and preschoolers).

## IV. Work Plan

<u>Activity</u>	<u>Period</u>	
A. Conceptualization, initial planning for data collection, preparation of instruments	May 1989 - June	
B. Linking activities, pretesting and finalization of instruments training of data collectors	June - July	
C. Data collection	July - September	
D. Data processing and analysis	September - October	
E. Preparation of reports/review	November - December	
1. Study area report		
2. Review of study area reports		
3. Overall report		
F. Submission of final report	January 1990	
V. Financial plan (May 1989 to January 1990)		
A. Personal Services		
1) One Project Leader, 1 Research Associate and 4 study leaders		P 87000
2) Seventeen Research Assistants		120000
3) Statistician and computer programmer		20000
4) Five Clerk-typists (part-time)		20000
		<hr/>
		P247,000
B. Maintenance and Operating Expenses		
1) Supplies		30000
2) Transportation		27500
3) Equipment (food scales, etc.)		20000
4) Others (xeroxing, communications, etc.)		5500
		<hr/>
		83,000
C. Special Purposes		
1) Incentives for 600 households		30000
2) Computer services (time, tapes, etc.)		45000
3) Insurance for data collectors		3000
		<hr/>
		78000
D. Administrative cost and contingency (10% of A, B and C)		
		40800
		<hr/>
		TOTAL P 448800

VI. Key Project Staff

Cecilia A. Florencio, Ph.D. - Project Director

Lucy Rabuco, Ph.D., U.P. Manila

Emily Flores, M.D., U.P. Manila

Ma. Antonia Tuazon, Ph.D., U.P. Los Baños

Ma. Veritas Luna, M.S., U.P. Diliman

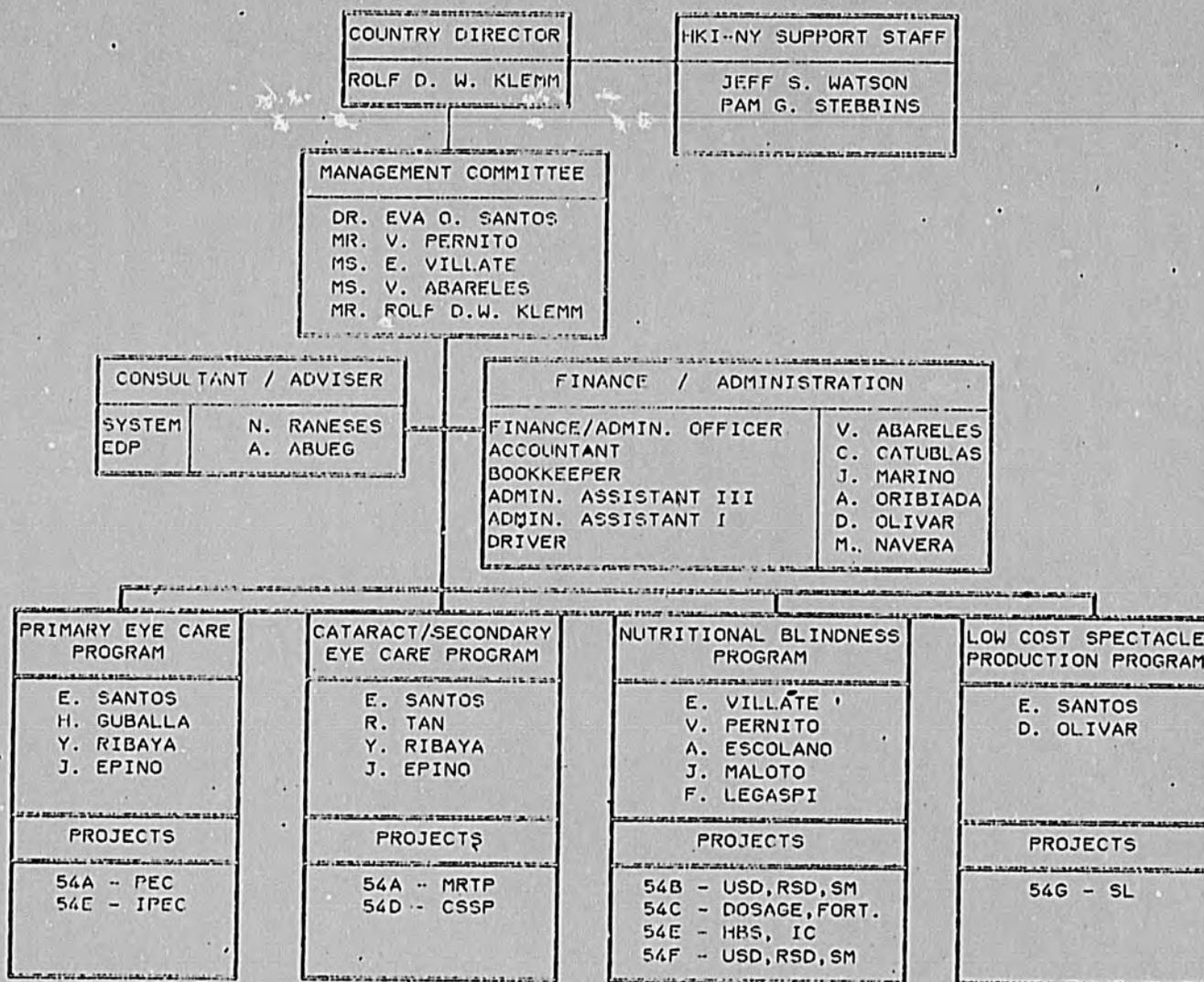
Candelaria Formacion, M.S., U.P. Iloilo

Submitted by

CECILIA A. FLORENCIO  
Professor of Nutrition

17 May 1989

HELEN KELLER INTERNATIONAL INC.  
PHILIPPINES  
ORGANIZATIONAL STRUCTURE



GLOSSARY OF PROJECTS:

- CSSP - CATARACT SURGERY SUPPORT PROGRAM
- DOSAGE - DOSAGE/SIDE RX STUDY
- MBS - MODIFIED BASED STUDY
- IPEC - INTENSIFIED PRIMARY EYE CARE
- IC - IMPRINT CYTOLOGY
- MRTP - MODIFIED RESIDENCY TRAINING PROGRAM
- FORT - FOOD FORTIFICATION
- RSD - RURAL SERVICE DELIVERY
- SM - SOCIAL MARKETING
- USD - URBAN SERVICE DELIVERY

GLOSSARY OF FUNDING SOURCES:

- 54A - MATCHING GRANT USAID
- 54B - CHILD SURVIVAL II USAID
- 54C - HOFFMAN LA ROCHE
- 54D - JAPAN SHIPPING INDUSTRIES FOUNDATION
- 54E - INT'L CENTER FOR EPIDEMIOLOGIC AND PREVENTIVE EYE CARE
- 54F - GENERAL ELECTRIC GRANT
- 54G - AUSTRALIAN EMBASSY

**INFLUENCING HEALTH POLICY AND PROGRAMS: A PVQ CHALLENGE**

**A CASE STUDY OF HELEN KELLER INTERNATIONAL'S  
EFFORTS TO INFLUENCE VITAMIN A PROGRAMS AND POLICIES  
IN THE PHILIPPINES**

by

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**June 21, 1989**

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## ABSTRACT

June 21, 1989

## INFLUENCING HEALTH POLICIES AND PROGRAMS: A PVO CHALLENGE

### A CASE STUDY OF HELEN KELLER INTERNATIONAL'S EFFORTS TO INFLUENCE VITAMIN A PROGRAMS AND POLICIES IN THE PHILIPPINES

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#### 1.0 INTRODUCTION

Increasingly the PVO donor assistance model is being viewed as an alternative to official development programs. This stems as much from any possible shortcomings of official development efforts as it does from the special qualities PVOs offer. It must be recognized, however, that the PVO donor assistance model is not a uniform model, largely because PVOs themselves have vast differences in spite of their common legal status as non-profit, non-governmental and/or voluntary. Nonetheless, PVOs share some features which make them potentially more responsive to development goals and processes than many other assistance mechanisms. To the extent that these features have succeeded or failed to influence national health policies and programs, they have met with both praise and criticism.

PVOs have been lauded for their ability to reach the poorest of the poor; facilitate local resource mobilization; provide cost-effective service delivery; underwrite innovative risk-taking; interpret local needs to higher level programming; and in some cases, effectively advocate for and influence national policy. To the extent that each of these PVO strengths is directed towards influencing health policies and programs a PVO can maximize its strategic advantage to shape national health policies and programs.

On the other hand, PVOs have been criticized for their small size and limited scale of resources; their inability to bring small-scale demonstration projects to a national scale; their lack of technical capability to manage complex projects; their strained relations with governments stemming from mutual mistrust; their tendency to view projects on a local level in isolation of larger processes; and their weak managerial and organization capabilities.(1) While these are pitfalls common to many PVOs, they are not true of all; nor is there any inherent reason why PVOs cannot minimize, if not overcome, problems of scale, resources, technical and managerial abilities in order to effectively influence health policies.

This paper will look at the case study of Helen Keller International in the Philippines and its efforts to catalyze and shape vitamin A policies and programs. It will describe processes used by HKI to maximize its strategic strengths as a PVO and minimize its inherent weaknesses.

## 2.0 HELEN KELLER INTERNATIONAL AS A DEVELOPMENT CATALYST

HKI considers itself a development catalyst organization in terms of blindness prevention and rehabilitation. A development catalyst organization, as defined by the Asian NGO Coalition (ANGOC),

uses temporary interventions to promote the creation of sustainable locally-accountable institutions that improve the quality of life (2).

This view shapes HKI's decisions related to program management, resource allocation and technical assistance. It differs, therefore, from organizations that directly deliver services themselves in that HKI makes explicit attempts to create local capacity to provide services that can be locally sustained.

In the Philippines, HKI's goal is to catalyze indigenous capacity to plan, carry out and implement sustainable activities and programs aimed at reducing nutrition blindness. In other words, HKI's goal is not for it to distribute vitamin A supplements to a large number of children nor for it to conduct nutrition education classes among mothers. Instead, HKI's goal is to enable local institutions (governmental and/or non-governmental) to develop and sustain the capacity to offer such services.

This distinction is important because it has guided HKI's decisions in terms of identifying counterpart institutions, designing demonstration projects, and developing program management strategies. It has also been the guiding principal which has often made it difficult for HKI to meet output expectations, maintain project timeframes and adhere to detailed implementation plans. It must be remembered that service delivery is easier, produces results more quickly, and is more likely to please donors who want their resources matched with clearly measurable outputs.(3) HKI, however, has tried to resist the service mode in the belief that in the long-run its catalytic development strategy has a greater chance of improving indigenous institutional capability and program sustainability.

### 3.0 MAPPING OUT PROGRAM AND POLICY ENVIRONMENT

The first task was for HKI to obtain an overall perspective on vitamin A program and policy gaps in the country. To do this, informal interviews were conducted with decision makers and field implementers at the Department of Health, nutrition institutes, and other non-governmental organizations involved with health and nutrition activities. Information obtained through this process provided insights on the status of key policy and program elements such as political commitment, technical and financial resources, technical "know-how", and managerial structures. Even more important, it provided insights on the dynamics both within and between key nutrition and health organizations. (4)

Based on HKI's findings it was clear that:

- 3.1 Political commitment and will toward acting on the vitamin A deficiency problem in the country could be cultivated and strengthened. The prevention of blindness is a low priority of the GOP compared with other health priorities, however, the improvement of the nutritional status of preschoolers, pregnant and lactating women is relatively high. This led HKI to pursue vitamin A deficiency program and policy formation in the context of nutritional priorities as well as blindness prevention.
- 3.2 Skepticism and fears about vitamin A needed to be overcome. In late 1986, vitamin A was extremely politicized due to sensationalized claims of vitamin A toxicity. There was tremendous confusion over what constituted a safe dose for preschoolers, and which preschoolers should be included for prophylaxis. Moreover, a local cause-oriented group had politicized vitamin A to such an extent that policy makers were unwilling to move on any but the most cautious intervention strategies.
- 3.3 Any efforts by "foreign" assistance organizations should simply support and strengthen local organizations, and minimize the frontline visibility of the foreign organization. The 1986 Philippine "revolution" fueled nationalist sentiments. Shortly thereafter, a vitamin A supplementation and mortality study in which the visibility of "foreign" advisers was met with serious community resistance. The combination of these events produced an unwelcoming environment for both a "foreign PVO" such as HKI and for programs having anything to do with vitamin A; say nothing about the mixture of the two.

- 3.4 There was a need to help shape a vision for vitamin A deficiency prevention and control. In spite of documented high prevalence rates of xerophthalmia, no specific interventions had been systematically undertaken by the DOH. Vitamin A deficiency (VAD) was viewed within the context of general malnutrition by the DOH, with no specific attention given to this specific micronutrient deficiency. No directional framework existed to guide technical assistance or donor agencies in terms of areas in which support was needed.
- 3.5 There was a definite need to design and carry-out an effective demonstration project with the Department of Health which could serve as a model for integrating vitamin A services into existing health services. Rich experiences gained from pilot vitamin A initiatives conducted by the Nutrition Center of the Philippines (NCP) did exist. However, since these were not conducted by the DOH, the technology transfer and program sustainability were inadequate. Examining the previous NCP efforts permitted HKI to avoid similar pitfalls and to incorporate the principals of "sustainable system development", as David Korten calls it. This requires that (1) an effective program be developed within the system which must implement it, and (2) program responsibility is transferred to the system. (5)
- 3.6 Even though the international literature on vitamin A was vast and extensive, policy makers needed to be made aware of the recent findings and implications for the Philippines. Even when studies were conducted locally, such as the prevalence surveys conducted by FNRI or the pioneering studies on MSG fortification with vitamin A by NCP, their impact seemed to fall short of mobilizing programs and policies aimed at reducing vitamin A deficiency in the country. This is in part because of the limited advocacy roles played by the research groups, the limited involvement of the DOH in the formulation and conduct of the research, and the professional barriers between the DOH and organizations external to the DOH.
- 3.7 The issue of vitamin A toxicity, sensationalized during an ill-fated mortality study, needed to be resolved before any vitamin A supplementation policies or programs could be considered. The politicized issue of hypervitaminosis led policy makers to seriously question whether Filipino children were genetically predisposed to higher rates of side-effects. Without the resolution of this issue, the DOH was unwilling to engage in any supplementation program.

- 3.8 Policies which existed on vitamin A supplementation were out-dated and forgotten by field implementers and policy makers alike. The official vitamin A supplementation policy in the Philippines dated back to 1973. This policy suffered from the fact that it was clearly out-dated in terms of currently acceptable recommendations, and because it had long been forgotten by both field implementers and national decision makers inspite of its existence as an official DOH departmental circular.
- 3.9 There was a need to tap existing technical resources outside the DOH to assist in program and policy formation. As mentioned earlier, the DOH lacked personnel experienced in planning and implementing vitamin A activities. Outside of the DOH technical agencies, such as the NCP and the FNRI, possessed specialized skills in xerophthalmia case detection and management, the conduct of prevalence surveys, and the training of health workers in the prevention of VAD. Unfortunately, political and professional barriers between DOH officials and these organizations had thwarted efforts of collaboration and sharing of technical capability. To overcome the barriers meant devising strategies which encouraged partnership and open communication.
- 3.10 DOH had an extremely limited budgetary allocation for vitamin A deficiency prevention and control. Within the DOH, small provisions for the procurement of supplements existed, but none for training or monitoring of vitamin A activities. Outside of the DOH, a vast and varied donor presence existed; however, none of the donors (with the exception of AID/W through HKI) was providing substantial assistance towards catalyzing vitamin A programs and policies. Most of the donors were aware of the politicized toxicity issue, and were hesitant to risk initiating vitamin A activities in the wake of all the sensationalism. Still others were simply waiting for the GOP to enact a supplementation policy, before offering support.
- 3.11 The DOH possessed the most extensive primary health care system in the country reaching most of the rural areas, and as such should be considered the key counterpart and implementing organization for vitamin A services. However, working with the DOH also meant working in the context of its systemic weaknesses including cumbersome bureaucratic and approval processes, mistrust of "outsiders", top-down planning and decision-making, weak technical skills, and the lack of innovation and initiative.

4.0 MAXIMIZING STRENGTHS, MINIMIZING WEAKNESSES: HKI'S STRATEGIC DECISIONS TO CATALYZE HEALTH POLICY AND PROGRAM FORMATION

HKI used a variety of approaches and processes to address the aforementioned program and policy gaps. It is difficult to trace the precise effects of one approach on filling a particular gap, or objectively weigh one strategy's impact over another in terms of catalyzing vitamin A program and policy initiatives. The process of influencing health programs and policies is extraordinarily dynamic and interactive, and many of the processes used to close gaps overlap. For example, by helping the DOH to design and implement a pilot vitamin A supplementation program, HKI was simultaneously building the in-house DOH technical capability, developing a framework for intervention, strengthening political resolve to act on the VAD problem, and providing an opportunity for the DOH to overcome its skepticism and fears regarding vitamin A toxicity. Moreover, it is seldom the influence of one organization which mobilizes policy makers to take action.

Nonetheless, there are approaches which HKI feels had more impact than others in closing the gaps and catalyzing policy response. Among these are:

- 4.1 Helping the DOH to design and take responsibility for its own pilot vitamin A projects. HKI assisted the DOH to develop three pilot initiatives, which have since been labelled by the DOH as "advanced implementation" models; not pilot projects. These initiatives include the integration of vitamin A supplementation to high-risk and xerophthalmic preschoolers in both rural and the often neglected urban depressed communities, as well as the intensification of nutrition education to complement service delivery. The DOH has assigned project leaders and coordinators at each administrative level (national, regional and provincial) to play major roles in implementing and monitoring project progress. In sharing the control and direction of the project, HKI is able to have an impact and reach much greater than its size. Also, as mentioned earlier, in order for sustainable systems development to take place, a program must be developed within the system which must implement it, and responsibility must be transferred to the system.

4.2 Using a multi-level program planning and implementation approach to facilitate the communication of local program needs to higher health authorities while simultaneously planting seeds for program expansion even at the pilot project stage. In the process of working with various administrative levels of the DOH, we learned that communication is minimal between the different levels of DOH bureaucracy. In spite of the voluminous health reports sent to the national level by the field, national policy makers have a distorted picture of the day to day realities of delivering services at the field level. Likewise, field implementers have little appreciation for national level constraints. This often results in unrealistic program expectations on both sides. Program policies designed by national level staff to guide field implementors are inadequately conceived or demands of field implementors are too localized for national application.

In an effort to bridge this vast gap, HKI tapped national level staff to participate in key aspects of field implementation of its pilot projects. Similarly, HKI tapped field implementors to participate in the drafting of program and policy guidelines and recommendations.

Coordinating the joint planning and implementation processes involved much effort and did result in delays of projected activities. But the advantages far outweighed the difficulties. For example, field implementors who recognize the constraints that most peripheral health workers have (rural health midwives in adequately reaching the households in her catchment area recommended that volunteers and teachers be used in case detection and treatment of VAD. This contrasted with national policy makers who feared the use of "non-health" personnel could pose threats of "overdosing". A compromise policy was decided upon, whereby trained volunteers and teachers would first be supervised by the rural health midwife before being able to conduct case detection and treatment on her own.

Another example is the inclusion of special condition warranting universal distribution of vitamin A for measles outbreaks in the DOH policy on vitamin supplementation. This input came from field implementors who knew that providing supplements to measles cases on a case to case basis was impractical in remote areas where measles quickly spreads, measles immunization coverage is low and where vitamin deficiency prevalence tends to be high.

4.3 Using flexible financing to underwrite and catalyze relevant research necessary to clarify key policy questions. The issue of vitamin A toxicity had become sensationalized and politicized due to wrong

attributed side-effects resulting from a study investigating vitamin A supplementation and mortality. International data and studies on side-effects were rejected by cause-oriented groups on the presupposition that side-effect rates may be genetically linked, and the DOH had no local data to refute this possibility. In order to ascertain levels of side-effects from high-dose vitamin A supplementation HKI helped design, initiate and fund a double-blind case-control study; the results of which would be used by the DOH to clarify the toxicity issue and its vitamin A dosage policy.

4.4 Creating forums in which policy makers can be made aware of results of pilot projects and research findings are needed to translate these findings into policies. Research findings can serve as powerful tools in shaping policy decisions. However, no matter how wide the research base and convincing the findings, if the data are not available to, known or understood by policy decision makers, their value in terms of influencing policy is limited. Helping decision makers translate and interpret research findings (often from research conducted outside their own country) is an important role PVOs can play. It requires, however, that a PVO know the host-country situation well and also possess a technically sound understanding of the relevant research conducted. HKI helped organize forums bringing together researchers, field implementers and senior level health officials to discuss pilot project and research results within a framework for policy action.

4.5 Drawing on top-level technical talent, both local and international, to supplement in-house technical expertise. HKI was able to tap the services of technical experts to assist in key aspects of the vitamin A activities. Through the use of a cooperative agreement between Manoff International and AID, HKI was able to avail of a communications expert to help HKI and the DOH formulate a communications strategy for vitamin A deficiency. Similarly, HKI frequently consulted the International Center for Epidemiologic and Preventive Ophthalmology (ICEPO) of Johns Hopkins University, with regard to technical aspects of imprint cytology, research methodology appropriate for the toxicity and dosage study, and other technical areas. Within the host-country, HKI played the role of a "buffer" in bridging political and institutional barriers which prevented groups like the Food and Nutrition Research Institute and the Nutrition Center of the Philippines from working with the DOH.

- 4.6 Facilitating the development of public-private partnerships. HKI has helped to forge relationships between the DOH and private firms. Examples of this include the use of an advertising agency which has been tasked with the creative execution of vitamin A communication materials, and the Nutrition Center of the Philippines which has been a source of advice and guidance in vitamin A activities. In this respect, HKI used its natural advantage in facilitating the formation of partnerships by acting as a credible bridge among potential partners who have history of conflict or mistrust.
- 4.7 Facilitating DOH-donor relationships. Keenly aware of its resource limitations, particularly if pilot vitamin A initiatives are to scale up, HKI has sought to keep donors informed of DOH initiatives and create a framework and opportunities where donors and the DOH can engage in negotiations required to launch cooperative activity. These efforts took the form of inviting organizations such as WHO, UNICEF, AID, and other organizations to take part in policy dialogues with the DOH regarding supplementation policies and nutrition education strategies.
- 4.8 Providing Opportunities for Key Decision Makers to Obtain Exposure to Innovative Vitamin A Interventions. HKI was able to offer two key DOH policy makers the opportunity to spend one week in Indonesia learning about Indonesia's efforts to expand its fortification efforts, as well as discuss other vitamin A initiatives in the country. HKI's office in Indonesia facilitated the visit. In addition to the exposure to the fortification efforts, the visit resulted in a commitment to partnership between the two governments' health departments.
- 4.9 Building Relationships with DOH Policy Makers and Field Implementers founded on Trust, Partnership and Professional Respect. This is perhaps the most important ingredient for foreign PVOs to work in a host-country and with host-country agencies towards effecting policy and program changes. Its importance merits discussion in a separate chapter.

## 5.0 PVO-GOVERNMENT PARTNERSHIP: LESSONS LEARNED

Traditionally, government organizations have been skeptical of PVO participation in the development process. Similarly, PVO's have displayed a reluctance to involve government agencies in their initiatives. This is understandable because of the major sector differences between the government and voluntary sectors.

A conceptual model offered by David Korten argues that, in contrast to the government's primary concern to preserve social order is the voluntary sector's concern to actualize social visions. The difference in the fundamental concerns of each sector also account for the differences in how each organizes itself (hierarchies vs. consensus), mobilizes resources and social energy (authority and coercion vs. shared values) and the mechanisms of enforcement each uses (supervision and rules vs. moral obligation and professional ethics). (6)

Nonetheless, the differences that exist between PVOs and GOs need not pose barriers beyond which various forms of partnership can be established. It is interesting to note that one sector's strengths often complement another sectors' weaknesses. In the case of the DOH, its weaknesses in terms of trying out innovative solutions to the vitamin A deficiency problem or tapping voluntary social energy to act on the problem were overcome to some extent developing a partnership with HKI. Similarly, HKI's problems of resources and infrastructure to scale-up vitamin A supplementation efforts was minimized by tapping and coordinating with the DOH.

This does not presuppose that relationships between the government and the PVO will always be complementary and smooth. In the case of the DOH and HKI adapting to each other has required an enormous amount of patience born out of a sincere commitment to affect program and policy changes.

Insights that HKI has learned through working in partnership with the DOH include the following::

- \* Bureaucratic protocol can be flexible, particularly if mutual trust prevails in the relationship between the government and the PVO.
- \* An operating norm in working with the DOH is that individuals with authority to make decisions have little time to study policy or program options and implications; while individuals with time seem to have minimal authority to decide. As such, PVOs need to work with and help develop middle-level management in policy formation and program development. Additionally, PVOs can help facilitate opportunities for top-level management to be concisely updated on policy development needs and options.

- \* Government hierarchy reinforces compliance to orders and fosters a "do what your told" attitude among civil servants. The unspoken rules for promotion and upward mobility in the hierarchy dictate that you function to please your supervisor. HKI's experience with the DOH reveals that DOH personnel are capable as individuals of innovation, independent thinking and risk-taking when conditions encourage and reward these qualities. But as an institution, opportunities to exercise these qualities are not rewarded, and may in fact be reprimanded. PVOs must understand this, and set their expectations accordingly. There are risks in demanding from health personnel independent thinking beyond their position of authority.
- \* Government bureaucracies are reluctant to make changes. PVOs must realize that introducing alternative or innovative solutions to problems which demand bureaucratic change requires resourceful leadership and flexible resource use. Truly sustainable programs only gradually develop a fit with their bureaucratic environment, mainly by changing themselves, and a little by changing their environment. (7)
- \* PVOs must take the first steps in being open and trusting, and must demonstrate that its collaboration offers some benefit to the government agency. This makes a strong case for PVOs to enhance their technical capacity.
- \* PVOs must be willing to provide as much energy and effort into strengthening the skills and capabilities of DOH personnel to bring about a vision, as it does its own organization.

## 6.0 LIMITATIONS OF HKI IN INFLUENCING HEALTH POLICIES AND PROGRAMS

### 6.1 Scope of HKI's Mission

HKI's mission is to "build indigenous capability to prevent blindness, restore sight, and rehabilitate the incurably blind where the need is great".(8) Inherent in this mission statement is a definition of the agency's scope and focus. For example, in the area of vitamin A deficiency, HKI's perspective draws the line at nutritional blindness interventions, and does not take on other child survival or nutrition interventions. By limiting its involvement to vitamin A deficiency HKI is able to focus clearly on its mission and purpose and direct its resources to catalyze program and policy initiatives to this end. It gives HKI an advantage over many PVOs who may take on the enormous and all-encompassing task of "community development".

At the same time, HKI's single focus limits the scope of the policy and program changes which it undertakes to affect. For example, in drawing the line at vitamin A deficiency, HKI is limited in addressing the underlying problems faced by families whose children may suffer from vitamin A deficiency, such as lack of land and access to income. These underlying problems bring to fore a whole other dimension of policy and program implications such as equitable resource distribution and poverty. It can be argued that efforts to change policies in this realm, such as land distribution, can have a much greater impact on decreasing nutritional blindness than vitamin A supplementation or nutrition education interventions.

This does not imply that HKI change its mission or vision, but that it is conscious of its limitations in scope and perspective and seeks to learn from and share with those organizations who do address the underlying problems of poverty and malnutrition.

## 6.2 Sustained Program Support

By engaging in demonstration projects and mobilizing interest, expectation are raised to expand, replicate and sustain program activities. While HKI aims to promote sustainable programs this is not always achieved in the short-span of time for which resources are available. In terms of expansion efforts, HKI is not able to generate sufficient funds to assist in the implementation. This creates a situation where the spirit of collaboration and trust established between HKI and the government is diminished as HKI pulls out support.

This also points to a problem in the PVO-donor assistance model. In the case of HKI's vitamin A efforts, substantial support was derived from a centrally funded USAID grant. As the life of the grant expires, there are no mechanisms to sustain the governments desire to expand and replicate pilot initiatives.

## 7.0 RECOMMENDATIONS

It is clear that the PVO-donor model has tremendous advantages in affecting the development of health programs and policies. HKI's experience in the Philippines has shown that this model can catalyze program and policy changes. In fact, the Philippine Department of Health in collaboration with HKI over the past 2 years has:

1. Developed five-year directional plan to guide its vitamin A program.
2. Committed budgetary resources for the procurement of vitamin A supplements.
3. Revised its Departmental Circular for Treatment and Prophylactic Supplementation and made Philippine-specific adaptations to the WHO recommended guidelines for vitamin A supplementation.
4. Developed in-house technical capability to train health workers in vitamin A case detection and management.
5. Established contact with potential donors and has proposed the inclusion of vitamin A activities in the upcoming AID child survival project.
6. Established a regional partnership with Indonesia and committed itself to engage in technical sharing, particularly with regard to fortification with vitamin A.

There is still room for enhancing the capabilities of PVOs to influence health programs and policies. This can best be done through:

1. Providing mechanisms through which PVOs can gain access to top level technical talent.
2. Developing a means by which centrally funded PVO projects can be sustained by local AID missions or other donors if replication and expansion potential are great.
3. In order to insulate themselves from the affects of over-dependency on a single funding agency, PVOs should develop a broad funding base.
4. In the case where PVOs have had particular success in catalyzing policies and programs, donor agencies should be receptive to providing support for sustaining the PVOs presence in the host-country to guide program expansion efforts.

5. Donor agencies should provide support for the sharing of information and technical expertise, the building of alliances with other voluntary, as well as commercial and governmental sectors among international and local PVOs.
6. Donors should permit greater flexibility of fund use, and allow PVOs to build into their budgets contingency funds which can be used to respond to unplanned program needs and opportunities.

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## Notes

- (1) These criticisms are taken from L. David Brown and David Korten's paper, The Role of Voluntary Organizations in Development, A Concept Paper Prepared for the World Bank, February 1989, page 16.
- (2) This definition is taken from L. David Brown and David Korten's paper, The Role of Voluntary Organizations in Development, A Concept Paper Prepared for the World Bank, February 1989, page 6.
- (3) This distinction comes from L. David Brown and David Korten's paper, The Role of Voluntary Organizations in Development, A Concept Paper Prepared for the World Bank, February 1989, page 10-11.
- (4) Since these are interactive relationships, continual assessment and reassessment needs to be built into PVO planning and decision making.
- (5) Korten, David, "Micro-policy reform: the role of private voluntary development agencies", Working Paper No. 12, National Association of Schools of Public Affairs and Administration, Washington, DC, August 1986.
- (6) This critique is taken from L. David Brown and David Korten's paper, The Role of Voluntary Organizations in Development, A Concept Paper Prepared for the World Bank, February 1989, page 5.
- (7) HKI's Mission Statement as reflected in its 1989 Strategic Plan.
- (8) Taken from Fred Munson's draft report on the Cost Analysis of Eye Care Services in Sri Lanka and the Philippines, (not yet published).