The Timor Leste Nutrition Enhancement Project

Evaluation

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Prepared for
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and
CARE Australia

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Glossary of terms

CHC	Community Health Centre
DHS	District Health Service
DTT	District Training Team
IHNEP	The Integrated Health and Nutrition Project
LISIO	Livrinho Saude Inan ho Oan. (Mother and Child health Book)
MOH	Ministry of Health (refers to the national level health department)
NEP	The Timor Leste Nutrition Enhancement Project
PSF	Promotor Saludad Familial or Family Health Promoter
REINHA	Reinforcing Intervention for Nutrition and Health Action
SF	Supplementary food
SFP	Supplementary feeding program
SISCA	Servisu Integradu Saude Communitaria or Integrated Community Health Services
WFP	World Food Program

Executive summary

Malnutrition, both acute and chronic, is a serious issue in Timor Leste. The Ministry of Health (MOH) has identified malnutrition among vulnerable groups as one of its key priority areas. In an effort to help address this ongoing problem, CARE International in Timor Leste (CITL)has been working in collaboration with the MOH to improve nutrition in children under five years of age, pregnant women and lactating mothers. The first phase of this effort, The Integrated Health and Nutrition Project (IHNEP), was implemented in 2005 and provided growth monitoring, nutrition education, supplementary feeding and medical referrals for the target groups.

In late 2006 the responsibility for the supplementary food purchase and distribution component of the program was planned to be assumed by the MOH and World Food Program (WFP). However, the MOH lacked the logistical capacity to distribute the food from the community health centers (CHC) to the beneficiaries in the villages and to implement the needed upgrades to the food storage facilities. The MOH requested assistance from CARE and in January 2007, The Reinforcing Health and Nutrition Action - Support to the Ministry of Health Project (REINHA) was implemented in order to provide the requested support. Other program activities included conducting growth monitoring and nutrition education sessions with malnourished children and care givers.

The most recent phase of CARE's work in Timor Leste, which began in June 2008 and is currently underway, is the Nutrition Enhancement Project (NEP). The project activities focus on continuation and extension of the support provided to the MOH with a new emphasis on transfer of skills as opposed to direct implementation by CARE staff. One of the main project activities is supporting the training and mentoring of the family health promoters[1] (PSF) who provide education to community members.

The project has just completed the first year of activities and the current evaluation was done in order to assess the impact of PSF related activities; identify ways to improve the education activities; and identify ways to improve communication and coordination with health department counterparts in order to support greater involvement, and eventual handover, of all PSF activities. Information was gathered from the review of CARE proposals and reports, review of MOH documents, interviews with health department staff, interviews with PSF and focus group discussions with mothers.

PSF related activities

Findings revealed that PSF were unanimously positive about their commitment to improving health conditions in their communities and expressed long term dedication to the task. They spoke positively of their confidence level and attributed this positivity to having been trained, experiencing an increase in their skills and perceiving positive changes in the community due to their efforts. Respondents from the health department also expressed positive opinions about the role of the PSF in promoting community health. Several health department respondents viewed the PSF as integral in the execution of SISCA activities and as a way to offset the problem of the CHC being understaffed. Both PSF and health department respondents perceive that rates of attendance at SISCA activities have increased due to the efforts of the PSF.

[1] Also referred to as Community Health Volunteers

PSF perceive that household practices in their communities such as hand washing, bathing, cleaning the house, throwing away trash in a specified location and giving a greater variety of foods to children have been adopted as a result of mothers participating in education sessions. Interestingly, mothers corroborated this information and reported the same behavior changes since participating in the sessions. Mothers were also able to express several connections between behaviors and disease prevention indicating that they understand the purpose of their actions. Several of the mothers were also able to describe the signs and symptoms of illnesses such as anemia, pneumonia and malaria.

Education activities

These results indicate that education sessions have had some positive results in changing understanding in the community. However, only a few mothers in each group were able to demonstrate this type of understanding. This may be due to normal group dynamics but may also be an indication that the level of education materials presented and/or the approach used during the education sessions needs some review. Both PSF and mothers reported that no activities such as singing, games or role playing are done during the education sessions. Employing these techniques may make the sessions more engaging and increase the assimilation of the information for a greater proportion of mothers.

Communication and coordination with health department

Interviews with health department staff revealed that no formal skills evaluations are currently being done for PSF. CHC staff provide occasional verbal feedback about the skill levels of the PSF to DHS staff and DHS staff directly observe the performance of the PSF when they attend SISCA activities, but none of this monitoring is reported in writing. Although a skills evaluation checklist created by the MOH is on file at the CARE office, this form is not being used by any of the health department staff in the field. Weak links in the skills evaluation system for PSF were identified as:

- Distribution of the skills checklist evaluation form
- Establishing a written reporting system using the checklist evaluation form
- Analyzing the information from the evaluation forms to develop refresher trainings for PSF

Health department respondents agreed that responsibility for developing training for PSF lies with the DHS. Respondents reported that the MOH has designated funds for training and estimated that funds for training every six months to one year might be available. In order for the DHS to secure the funds, a proposal must be submitted to the MOH. They also explained that all former financial reports must be submitted to the MOH before any new monies can be received. Interestingly, two of the respondents mentioned CARE's assistance with training as one reason they have not had to submit proposals themselves. Weak links in the training system for PSF were identified as:

- Establishing a reasonable training schedule for PSF
- Finalization of financial reports so proposals for training funding can be approved
- Submission of training proposals
- Securing of funds in a reasonable timeframe to implement training

Recommendations

Based on the findings of this evaluation, the recommendations below outline steps for increasing health department involvement in the evaluation and training of all PSF and supporting empowerment in the community by providing enhanced health education.

Communication with the health department

1. Conduct a series of workshops involving all partners which focus on clarifying procedures, establishing tools, assigning responsibilities and determining a timeframe for implementation.
2. Follow up workshops should be conducted in order to check progress and address any new obstacles to implementation.
3. Identify CARE staff who will meet with counterparts at each level of the health department on a regular basis in between scheduled workshops to check the progress of implementing the procedures identified in the workshop.
4. Submit quarterly reports and planning schedules to DHS and CHC

Support for PSF

5. Continue to provide regular refresher trainings to PSF in order to continually increase their knowledge and nurture their role as health educators in the community.
6. Develop laminated reference material that can be compiled in a binder and kept on hand by the PSF in the aldeia.
7. Review costs of transportation for each area so they can be adequately reimbursed for trainings

Education sessions

8. Make education sessions more of an "event" for women in the aldeia. Train the PSF to make the sessions participatory, active and engaging for the women. Employ techniques such as role playing, demonstrations, games with pictorial representations of information and songs about healthy behaviors that they can teach the children.
9. Put up posters with pictures of healthy behaviors to remind them of what they have learned – some of the posters can be cut up and the pictures can be used for games to review material.

Kitchen garden groups

10. Teach participants seed saving techniques to increase sustainability of the gardens.
11. Encourage participants to prioritize eating produce from the garden in order to support the health of their families and sell whatever is not needed by the household.
12. Review how to make watering cans and compost bins from locally available material.

Background

Malnutrition, both acute and chronic, is a serious issue in Timor Leste. The Ministry of Health (MOH) has identified malnutrition among vulnerable groups as one of its key priority areas. In an effort to help address this ongoing problem, CITL has been working in collaboration with the Timor Leste Ministry of Health (MOH) to improve nutrition in children under five years of age, pregnant women and lactating mothers. Efforts have focused on short term actions such as growth monitoring and supplementary feeding and long term actions such as promoting behavior change and increasing the capacity of the health department staff.

The first phase of this effort, The Integrated Health and Nutrition Project (IHNEP), was implemented in 2005 and provided growth monitoring, nutrition education, supplementary feeding and medical referrals for the target groups. In late 2006 the responsibility for the supplementary food purchase and distribution component of the program was planned to be assumed by the MOH and World Food Program (WFP). The plan was that WFP would deliver supplementary food to the Community Health Centre (CHC) and the MOH would distribute the food from the CHC to the beneficiaries in the villages. However, the MOH lacked the logistical capacity to distribute the food and to implement the needed upgrades to the food storage facilities. Therefore, the MOH requested logistical and technical support from CARE in the implementation of these activities.

Time	Program/Event
March 2005– June 2006	The Integrated Health and Nutrition Project (IHNEP)
April – end 2006	Temporary suspension of regular activities due to security crisis.
Jan 2007 – June 2008	Reinforcing Health and Nutrition Action – Support to the Ministry of Health Project (REINHA)
2007	Implementation of Servisu Integradu Saude Communitaria (SISCA) and Programa Saludad Familial by the MOH.
June 2008 – June 2011	Implementation of The Timor-Leste Nutrition Enhancement

Details of program goals and objectives can be found in Appendix I

In order to provide the requested support to the MOH, The Reinforcing Health and Nutrition Action - Support to the Ministry of Health Project (REINHA) was implemented in January 2007. Activities included conducting monthly supplementary food distribution from the CHC, growth monitoring for children under five years of age and pregnant and lactating mothers in conjunction with the MOH; conducting nutrition education sessions with malnourished children and care givers; and carrying out necessary repairs to the CHC storage facilities.

In 2007, the MOH initiated the Servisu Integradu Saude Communitaria (SISCA), or Integrated Community Health Services, with the aim to improve access to health services, particularly in remote areas. SISCA activities include child registration, growth monitoring, supplementary food distribution, health education, immunization and general medical consultation. The SISCA program is combined with the development of volunteers for the Programa Saludad Familial, or Family Health Program. These volunteers, called promotor saludad familial (PSF), or family health promoters, provide health and nutrition education,

assist CHC staff during SISCA activities and provide outreach to communities during other times.

The most recent phase of CARE's work in Timor Leste, which began in June 2008 and is currently underway, is the implementation of The Timor-Leste Nutrition Enhancement Project (NEP). The project activities focus on continuation and extension of the support provided to the MOH in the monitoring of nutrition status, provision of services and supplementary feeding programs with a new emphasis on transfer of skills as opposed to direct implementation by CARE staff. The project focuses on long term solutions such as:

- training, monitoring and evaluating government health staff in order to ensure that growth monitoring and supplemental feeding are done according to the new nutrition guidelines and protocols;
- supporting the training and mentoring of the PSF who will provide education to community members; and
- developing integrated nutrition activities that combine nutrition education, health promotion, identification and promotion of positive behaviors, and improve food availability (e.g. cultivation of kitchen gardens)

Training was provided by CARE to 290 PSF at the request of the MoH. CARE staff is currently providing ongoing mentoring and supervision to 120 of those PSF during SISCA activities. Quarterly meeting/training sessions are being held in order to improve the capacity of the PSF to provide education to community members. The next phase of program activities will involve greater support to the health department in the monitoring and management of PSF activities.

Purpose of the current evaluation

The purpose of the current evaluation is to assess the impact of PSF related activities over the past year; identify ways to improve the education activities; and identify ways to improve communication and coordination with health department counterparts in order to support greater involvement, and eventual handover, of all PSF activities.

Methodology

The information presented in this report was gathered from the following sources:

- Review of CARE proposal and reports
- Review of MOH documents
- Qualitative data described in the table below

Qualitative Data Collected		
Technique	**Respondents**	**Total conducted**
Key informant interviews	Health department staff	3 in Liquica, 3 in Bobonaro
Group interviews	PSF	1 in Liquica, 2 in Bobonaro
Focus group discussions	Mothers	1 in Liquica, 2 in Bobonaro
Focus group discussions	Kitchen garden group	1 in Liquica, 1 in Bobonaro

Due to time constraints, qualitative data was collected in the districts of Liquica and Bobonaro only. Interviews with PSF and discussions with mothers and kitchen garden groups were conducted by the consultant with the assistance of a translator. The consultant used

Indonesian and the translator used Tetun, and when necessary, the local dialect. Interview notes were taken by a locally hired assistant in Indonesian. Interviews with health department staff were conducted by the consultant in Indonesian and documented by the same locally hired assistant. Details of health department respondents and locations where interviews and discussions took place can be found in Appendix II.

Findings

Health Department Interviews

Communication with CARE

All of the respondents stated that they are happy with the communication with CARE up to now. Most communication is informal and done as needed. Several respondents stated that CARE could invite health department staff to their routine meetings and the health department staff could invite CARE to theirs; most felt that additional specific meetings are unnecessary.

Half of the respondents reported that they would like to receive a monthly report from CARE and a plan for upcoming activities whenever CARE makes one. One of the respondents reported that he has received reports from the REINHA Program (which is now the NEP) but he always has to request them.

The director of health promotion in Liquica said he would like to receive the plan in order to avoid double implementation of activities.

Reasons for wanting a monthly report

- They feel uncomfortable if they are unable to report to the MOH what their partners are doing
- In order to get feedback from CARE
- In order to know about any obstacles that CARE encounters so they can be discussed with the health promotion team at their monthly meeting

Current system of reporting or evaluating PSF activities

Currently, no written reports are being completed regarding PSF skill levels. Although a checklist has been created by the MOH for evaluating the skills of PSF, none of the respondents have it, and some do not know it exists. The director of health promotion in Liquica stated that he had a skills evaluation form that came from the MOH, but when asked to produce the form, he produced the SISCA activity report form. The director of the CHC in Maliana stated that, although they are understaffed, the staff could find the time to evaluate PSF if they had a simple to use checklist.

Monitoring Systems for SISCA and PSF	
SISCA Monitoring	**PSF Skills Evaluation**
♦ SISCA monitoring forms are completed in writing by CHC staff and sent to district health services ♦ The form includes information regarding how many PSF are active and how many are inactive ♦ The form does not include information	♦ No written reports are currently being completed, but information regarding PSF skill level is sometimes communicated verbally ♦ A form has been created by the MOH but CHC and DHS staff that were interviewed do not have it

regarding PSF skill level ♦ Reporting regarding SISCA is done through the nutrition department	♦ Reporting regarding PSF skill level is done through the health promotion department

Opinions on the need for PSF skills evaluation system

Several respondents expressed positive opinions about the need for PSF skills evaluation. At least two respondents think it is important to complete evaluation reports because it lets them know what type of refresher training is needed and which PSF should attend the training.

In contrast, the vice director of DHS in Maliana stated that they haven't developed a PSF evaluation system because they haven't felt it was necessary. He also stated that he felt the PSF could not be evaluated or asked to do too much because they are not getting paid. Likewise, the director of health promotion at DHS in Maliana expressed the need for the MOH to make some regulation about payments/salary for the PSF because as long as they are volunteers, DHS can not compel them to perform to a certain standard.

Opinions of the PSF system

All of the respondents expressed positive opinions of the PSF system. Some of the reasons given for their positive opinions are:

- SISCA attendance has increased because service is more complete and because PSF provide information and motivation to community members
- PSF are chosen by the community and because they live in the community where they volunteer, they are less likely to leave
- PSF help at SISCA, they encourage people to seek medical care and they inform the CHC staff when people in the aldeia are sick so CHC staff can go there and attend to them
- One respondent expressed that the PSF are starting to become helpful; they just need more experience.

Routine meeting/training for PSF

Most of the respondents referred to funding as a limitation to providing routine training for PSF. Comments and explanations regarding training and budgets are below.

Frequency

- Routine meetings with PSF already take place at SISCA.
- Routine meetings with all PSF and CHC staff are limited by budget and could possibly be done every six months.
- Now that the district training team (DTT) has been trained (see note below), PSF trainings can be done once per year.

Funding

- The MOH budgeted funds for training but then contracted with CARE so the funds have not come through DHS. [Note that this is a misconception of DHS staff: CARE has not received funding from the MOH.] In order to get funds for training, DHS has to make a proposal and submit it to the MOH; they have not submitted a proposal because they have been receiving support from CARE.
- DHS does not have enough staff or funds. They can submit proposal for funds but the process is long and they can not get funds until their previous financial reports

are submitted. One of the obstacles to submitting these reports is computer problems.

Several respondents mentioned the development of the district training team (DTT). Individuals from the DHS have been trained by the MOH to conduct trainings in their districts. Now that staff have been trained as trainers, DHS must send a proposal to MOH for funds to conduct PSF training.

Roles and responsibilities regarding PSF

Health department respondents were asked about the responsibilities of DHS, CHC and CARE in regards to PSF activities. Answers mentioned are in the table below.

DHS		CHC		CARE
monitoring training production of guidelines provision of money*		monitoring acting as trainers mentoring provision of money*		monitoring training mentoring coordinating with DHS

**US$5 is given to each PSF per SISCA activity*

According to the draft of the Family Health Promoter Program Guidelines, the responsibilities of DHS include:

- To provide a continual cycle of standard FHP (meaning PSF) training for new recruits and continuing education for FHPs
- To foster highly motivated supervisors of FHPs and the Program, and adequate and regular supervision and support of FHPs, through training in supervision and management skills
- To establish and implement regular monitoring and evaluation of all aspects of the Program.

According to the same document, the responsibilities of CHC include:

- To provide for the planning and implementation of, and participate in, regular monitoring of the FHPP Program, and supervision and support of FHPs
- To fulfill FHPP Program reporting requirements

Characteristics important for PSF

Respondents mentioned the following characteristics as important for PSF:

- Friendliness
- Discipline
- Responsible
- Independent
- Ability to act as example
- Having a desire to help
- Willingness to be a volunteer

Purpose of the PSF

Respondents mentioned the following as being the purpose of the PSF:

- To work for/help the community
- To provide health information to the community
- To motivate the community
- To work at SISCA

Comments regarding the purpose of the PSF included:

The PSF are a form of health transformation for the community. Over time, the community will get information from the PSF so they can become more independent.

The PSF are the hands and feet of the health staff.

PSF Interviews

Why they like being PSF

The PSF mentioned that they enjoyed getting work experience and helping out at SISCA. One of the groups mentioned that their skills are increasing, but they could not say which ones. All of the PSF groups mentioned that they were happy to be PSF because they like serving the community. Some of the comments included:

We want to be a bridge between the community and good health.

We want our community to move forward, not backward.

I am happy to help the community in order to build this country.

Difficulties associated with being a PSF

Difficulties mentioned by PSF fell into three categories: community acceptance of information, confusion about how to complete their tasks and logistical issues.

Issues associated with community acceptance of information:

- Sometimes people don't believe them or do not want to take their advice and seek health care.
- Sometimes a woman may want to seek care for herself or her child but the husband refuses to let them go.
- Many people won't use birth control.
- Sometimes mothers only want to come to SISCA for food supplements and do not want to check the weight and MUAC of their children.
- One group mentioned they felt the community doubted them because CARE promised to create a mobile clinic in the aldeia but it has not been done.

Issues associated with how to complete their tasks as PSF:

- Sometimes people ask them health questions they don't know how to answer.
- There is still some material they don't understand. Specifically mentioned was confusion about how to complete the Lisio (growth monitoring books given to mothers) and which dose of vitamin A to give children.

Issues associated with logistical difficulties:

- The need for chairs and tables for SISCA activities and materials for the cooking demonstration.
- Late arrival of material such as food supplements.
- Two of the groups also mentioned that their area is quite spread out and it is difficult to reach all the households, especially during the rainy season when they experience frequent flooding.

Behavior change in the community

Behaviors that PSF believe have changed in their communities since the education sessions started are:

Care seeking

- More women are bringing their children to SISCA activities
- People go to the health post more often when they are sick
- Pregnant women are getting regular check ups even though they have to walk for two hours to the health posts

Household practices

- People are cleaning their yards and houses (specifically bathrooms) in order to prevent malaria
- People are throwing trash away in a specified location
- People are washing hands before cooking and eating; washing dishes; and boiling water for drinking
- People bath more often
- People are giving more variety of foods to the children; rates of malnutrition have decreased

Behaviors that PSF believe are most difficult to change are:

- People not using birth control
- Giving birth at home
- Changing old beliefs so people will seek care when they need it
- Changing the "consciousness" of the people

> One group of PSF mentioned that the CHC staff have been mad at them three times because they are always late. This is a behavior of their own they want to change.

Confidence of PSF

All of the PSF groups spoke positively about their confidence levels. One of the groups mentioned that it was difficult in the beginning and they were worried that the community wouldn't believe them, but they felt confident now.

All of the groups mentioned training as one of the reasons they feel confident. One of the PSF had only started two months prior to the interview and had not yet attended training but has been attending SISCA activities in order to learn how to complete his tasks. He also expressed a higher level of confidence.

Skills PSF report they have acquired

- giving information to the community
- weighing, measuring and registering children
- completing the LISIO

Besides training, other reasons mentioned for feeling confident included:

- They are able to speak with and motivate the community
- They are getting work experience
- They have developed skills
- They see the results of their work
- Their knowledge has increased
- They are helping their families, community and country

When asked whether they felt they could train new PSF, responses were:

- They felt confident that they would be able to train other volunteers
- They feel that they are capable of training new PSF if they have material to use
- They feel they could do it by themselves but it would be good to do it together for support
- They felt that they are not ready to train new volunteers but believe they could do it in the future if they have a manual

Monitoring and mentoring

Responses were mixed when PSF were asked about receiving feedback from CHC staff:

- One group reported that they get feedback from the midwife at SISCA if they make mistakes in their tasks such as checking growth indicators or filling in the register. This group also reported that they get feedback from CARE staff as well.
- One group reported that the CHC staff have not taught them how to measure MUAC and although the CHC staff have taught them how to fill in the register, they don't really understand it.
- One group reported that CHC staff tell them how to give succinct messages to the community and have taught them some signs and symptoms of anemia.

Other comments regarding feedback from CHC staff were:

- The CHC staff have told them that they "believe them" because they are close to the community and they know about the health of the community
- The CHC staff remind the PSF to tell them if someone in the community is sick

Further training

All the groups mentioned that they would like to have further training in order to increase their confidence level. Specific areas mentioned were:

- malaria
- nutrition
- anemia
- using computers
- being educators
- pregnancy care
- breast feeding
- how to complete the LISIO
- which dose of vitamin A to give

One group mentioned that they would like more training in weighing children and checking MUAC. The CARE project officer explained that because the area was inaccessible for the past few months because of the rainy season, the PSF in this area have not received the tools and training like other areas have.

Education sessions

Activities

All of the groups reported that they do not do any activities such as singing, role playing or quizzes during the education sessions, but they try to make the session funny so people will stay engaged.

Perceived opinions

They believe the women are happy to have the education sessions because:

- they don't have to go as far as the CHC to get information
- they really want to get information
- the topic is different every month

Length of commitment
All of the groups reported that they plan to be PSF as long as there is a program. One of the groups agreed that they will be PSF *forever*.

Compensation
The group in Tapo expressed that the money they receive for transportation for trainings is not enough. Ten dollars only covers transportation one way and does not cover their return trip.

One group expressed that they would like to receive some money from CARE like they do from CHC at SISCA. Another group said they would like to have a bag with a health logo on it

Focus Group Discussions with Mothers

Note: There was some difficulty getting the women in the group from Cameleramut to participate in the discussion and answer questions. This may have been due to language difficulties and the fact that the field officer that was assisting with translation had only been working with them for about two months. Therefore, the majority of information presented in this section was obtained from the other two groups.

Education sessions
Mothers' groups were asked about which topics they have discussed during education sessions, how the topics apply to their daily lives and which behaviors they have changed since participating in the education sessions. The women were a bit confused about the difference between the education sessions and SISCA activities (where they also do a refresher session and cooking demonstration).

All three of the groups reported that they adopted the behavior of hand washing before preparing food or eating after participating in the education sessions. Two of the groups were able to make the link between hand washing and preventing diarrhea.

Two of the groups reported that they are compiling trash in one place away from the house. Both of these groups were able to describe the reason as decreasing mosquitoes in order to prevent malaria.

Behaviors changed

Washing hands before eating
Compiling trash away from the house
Using a mosquito net
Bathing regularly
Brushing teeth
Washing clothes

Connections expressed

Washing hands before eating - diarrhea prevention
Disposing of trash - malaria prevention
Using a mosquito net - malaria prevention

Other responses:

- The Oeleu group was able to describe some of the signs and symptoms of malaria, anemia and pneumonia and reported they learned this during the education sessions.
- Several women also mentioned that they are using vegetables, oil, sugar, salt, carrots, sawi (a leafy green vegetable) and eggs when cooking with food supplements, which they learned to do during the cooking demonstrations.
- Besides one group mentioning having a quiz during the education session, the women reported that they do not do activities (such as singing or games) during the sessions.

Growth chart and nutrition indicators

The level of understanding about the growth chart and nutrition indicators was mixed:

Growth chart

- One group was able to explain the meaning of the different sections of the growth chart
- One group recognized the growth chart and described it as a way to know if the child's weight has gone up or down but could not describe the significance of the different sections of the chart.
- One group explained that the reason for checking the weight and MUAC of the child is to know if the child is thin. If the child is thin, they need vitamins and extra food (only one woman in the group seemed to know this).

Nutrition indicators

- They expressed a relationship between weight and illness but could not describe the relationship.
- There was some confusion about what might cause weight to go down. Explanations offered included diarrhea, not enough food, and not enough sleep.

Role of the PSF

Two of the groups reported that the PSF register, weigh and measure children and help with the education sessions. Some of the women reported that they are informed about SISCA activities by the PSF and some reported that they are informed by the head of the aldeia.

Kitchen Garden Group Discussions

Note: Two kitchen garden groups participated in focus group discussions. However, a full discussion was done with only one group due to language constraints and interruptions by an intoxicated man during the first discussion in Liquica.

The group in Bobonaro had an established community garden when the program began. They reported that they were growing only two types of vegetables in the original garden and now, since participating in the CARE program, they are growing a greater variety of vegetables.

Both groups have ten participants and both groups divide the total plot of land used into ten sections. Each participant is responsible for one section and takes whatever yield is produced in her own section. The Liquica group reported that they sell most of the yield from the garden and consume only a small amount. The Bobonaro group, in contrast, reported that they consume the majority of produce and sell a smaller proportion. The group in Bobonaro reported that the land owners are given one bunch of produce from each plot each day in exchange for use of the land.

The Bobonaro group expressed enthusiasm for the community garden because they can have vegetables without paying for them. They stated,

We are lucky because we can get money and eat every day.

They reported that they need compost, a larger container for compost (they are currently using buckets), and more watering cans. They also want to learn how far apart to plant the seeds and how to make the beds.

Discussion

Communication and coordination regarding PSF activities

Communication with CARE

All of the health department staff expressed that they are happy with the communication with CARE up to now. They reported that the CARE staff frequently come to their offices to coordinate activities and discuss any issues that are pending. Several of the respondents said that CARE could invite health department counterparts to their meetings and vice versa, but they did not feel that it was necessary to schedule any additional meetings. Although health department staff did not feel the need for more frequent meetings, scheduling additional meetings, or integrating time into the current meeting schedule, may be beneficial for the tracking the involvement of the health department in the evaluation and training of the PSF. As discussed below, there are several weak links in the evaluation and training system for PSF. Matching CARE staff with health department counterparts and following up on the progress of strengthening these weak points can be done through regular meetings and reports.

Half of the respondents reported that they would like to receive a written monthly report from the REINHA program. Reasons expressed for wanting the report included notification of any obstacles CARE is experiencing and feedback to the health department regarding execution of activities. This information can then be discussed amongst the health department teams (and CARE if they attend) at their regular meetings. No details were given about the length or detail needed in the reports. In all likelihood, a short recap of the month's activities and any obstacles encountered would suffice. It is worth discussing with health department counterparts whether a quarterly report would be frequent enough. These reports may also serve in the tracking of progress towards the health department taking a more active role in evaluating and training PSF.

Current system of reporting and evaluating PSF activities

Currently, the only formal reporting being done regarding PSF activities is the number of PSF who are active and inactive which is being recorded on the SISCA monitoring form. Respondents felt that monitoring of the PSF was the responsibility of all partners (DHS, CHC and CARE). It is clear, however, that CHC staff are best positioned to monitor PSF because they attend SISCA activities much more frequently than DHS staff. According to DHS respondents, CHC staff provide occasional verbal feedback about the skill levels of the PSF to DHS staff. DHS staff also observe directly the performance of the PSF when they attend SISCA activities for monitoring purposes. None of this monitoring is reported in writing. Although a skills evaluation checklist created by the MOH is on file at the CARE office, this form is not being used by any of the health department staff in the field.

Several DHS staff expressed positive opinions about the use of such a form saying that it would assist them in developing refresher training for the PSF. The director of the CHC in Maliana said that, although they are short staffed, they could use a checklist format to evaluate the PSF because it would not require too much time. In these cases, it appears that the main obstacle to implementing the skills evaluation is the distribution and utilization of the form.

In contrast, it was mentioned by two of the DHS staff that PSF could not be evaluated or expected to work to a certain standard because they are volunteers. This, however, was not reflected in the input from PSF themselves. Although money was mentioned by the PSF, they conveyed that they are dedicated to being volunteers because they are contributing to the health of their community. They also expressed that they are very happy to have received training and new skills. Sharing this information with the health department staff would allow them to see that although the PSF are not receiving very much money, they can be motivated to perform with the possibility of further training and the development of their skills.

In summary, the weak links in the skills evaluation system for PSF were identified as:

- Distribution of the skills checklist evaluation form
- Establishing a written reporting system using the checklist evaluation form
- Analyzing the information from the evaluation forms to develop refresher trainings and support the development of the PSF

Current system of training PSF

Respondents agreed that responsibility for developing training for PSF lies with the DHS. Respondents reported that the MOH has designated funds for training and estimated that funds for training every six months to one year might be available. In order for the DHS to secure the funds, a proposal must be submitted to the MOH. They also explained that all former financial reports must be submitted to the MOH before any new monies can be received. One reason given for why the report has not be made was that the computer was broken. Interestingly, two of the respondents mentioned CARE's assistance with training as one reason they have not had to submit proposals themselves as they felt this activity was already covered.

In summary, the weak links in the training system for PSF were identified as:

- Establishing a reasonable training schedule for PSF
- Finalization of financial reports so proposals for training funding can be approved
- Submission of training proposals
- Securing of funds in a reasonable timeframe to implement training

Health department opinions about the importance and role of the PSF

Respondents expressed positive opinions about the role of the PSF in promoting community health. Several respondents viewed the PSF as integral in the execution of SISCA activities and as a way to offset the problem of the CHC being understaffed. It was unclear whether respondents viewed the role of the PSF as health educators to be as important as their role as assistants to the CHC in providing health services. This is worth investigation as it will have an impact on whether future trainings focus on training PSF to empower community members through health education or training them to promote and assist with health department services.

Monitoring and mentoring of PSF

The PSF reported receiving some feedback from CHC staff regarding the execution of their tasks, but the responses were inconsistent. CHC staff work most closely with the PSF and are best positioned to coach and support them on a routine basis. Providing training to CHC staff in how to coach and support the PSF should be considered. Periodic trainings can be conducted by DHS but the regular on-going input from the CHC staff is critical in maximizing the performance and confidence of the PSF and developing a cooperative relationship between the PSF and CHC staff.

Impact of PSF related activities

Attitudes of PSF

Input from PSF indicate that they understand and embrace their role as community educators and health promoters. PSF were unanimously positive about their commitment to improving health conditions in their communities and expressed long term dedication to the task. They spoke positively of their confidence level and attributed this positivity to having been trained, experiencing an increase in their skills and perceiving positive changes in the community due to their efforts. When asked about difficulties associated with being PSF, they rarely spoke about personal difficulties but referred to difficulties in changing attitudes and behaviors in the community and logistical limitations to executing their tasks. There was only one mention of compensation for their work and one request for adequate compensation for transportation costs when they attend training. Most requests focused on increasing their knowledge and skill level.

All of the PSF expressed that they would continue to volunteer as long as a program exists. They also expressed that they would share any knowledge and skills they have with new PSF and others in order to continue to disseminate health knowledge.

Perceptions of behavior change

Both PSF and health department staff believe that rates of attendance at SISCA have increased. PSF also believe that people are more frequently seeking health care from the health centers when they are sick and pregnant women are going for prenatal care more often despite the fact that they may have to walk up to two hours to get to the health center.

Interestingly, nearly all of the behaviors that PSF perceive have changed within the community were reported by mothers as behaviors they have changed since attending the education sessions. PSF were not present during the discussions with mothers and therefore did not contribute during the sessions. Behaviors that were mentioned by both PSF and mothers were cleaning the house and yard, compiling trash away from the house, washing hands before preparing food and eating, bathing regularly, washing dishes and giving a greater variety of foods to children. No direct observations were done of behaviors in the community; therefore the scope of change can not be reported here. It would be worth following up with direct observational studies of actual behaviors in the communities.

Health knowledge amongst mothers

Women were able to mention several key health behaviors and link them with prevention of specific diseases. Although it was beyond the scope of this evaluation to determine whether the women were in fact practicing these behaviors, it is a promising sign that they have made the links between the behaviors and disease prevention. The responses of the mothers indicate

that health education is working, at least on the knowledge level which is a necessary step in the behavior change process.

As usual, in each discussion group there were one or two women who were more vocal than the others. This could be due to differences in personalities or because the vocal women were better informed than the others. It was the impression of the consultant that the latter explanation was more probable. This could be part of the normal process of certain individuals in a group being "innovators" and uptaking information and/or new behaviors quicker than the others in the group. However, the reticence of many of the mothers in the groups may also indicate a need for review of educational materials and educational activities in order to ensure that the approach is appropriate for the educational level and experience of most of the mothers. This is discussed in more detail below.

Mothers appeared to be having some difficulty understanding the growth chart and it's relevance to their children's health. Most mothers recognized the chart and expressed that it was a way to know if the child's weight had increased or decreased. However, most mothers had difficulty explaining the meaning of having a mark in the different sections of the chart, what might cause a child's weight to decrease or what should be done if the weight has decreased. These results indicate a need for more review in educational sessions of nutritional indicators and the impact of good nutrition on a child's health.

Education activities

Both PSF and mothers reported that no activities (such as singing, role playing, or games) are being done during the educational sessions. Only one group mentioned sometimes having a quiz. A more active and participatory approach may help more women integrate the information being presented during the sessions. Pictures can be used to present the information and then used for games to ensure that the women get to practice applying the information and making links between behaviors and health conditions. Activities such as creating songs that women can teach their children will promote the dissemination of information to children as well.

Changes in cooking behavior were mentioned by many women and this may be due to the engaging nature of the cooking demonstrations that are given. The women themselves actively participate in the cooking demonstration which is likely to be a strong factor in them retaining and applying what they learn. This type of approach can be used with other topics during the education sessions in order to increase understanding and retention of the information.

Maximizing health knowledge and establishing healthy behaviors within these communities is a critical step in decreasing rates of morbidity and mortality. Many areas are extremely hard to reach (particularly during rainy season) which makes travel between the aldeia and the health post difficult for both community members and health staff. Maximizing health knowledge and healthy behaviors will decrease the need for access to services which lay outside the aldeia and which are often inadequate.

Kitchen gardens

Unfortunately, very little information was gotten from the Liquica kitchen garden group due to language difficulties and disruptions caused by an intoxicated man who appeared to be the owner of the land where the garden is established. However, the Memo group was

enthusiastic about the project and about sharing information. They felt that the garden was very beneficial for them because it provided them with a healthy diet and with some income.

Both of the kitchen garden groups reported that the plot of land for the garden is divided into ten sections and each section is cared for by one of the participants. Each woman decides what to do with the vegetables produced in her section. The Oeleu group reported that they sell the majority of their crop and eat a smaller proportion. The Memo group reported that they eat the majority of their crop and sell a smaller proportion. This group also reported that one bunch of vegetables from each section was given each day to the owner of the land in exchange for use of the land.

Some tools have been provided to the groups such as a watering can. The NEP program manager explained that CARE supplied a limited amount of these tools and expected the participants to take responsibility for supplying whatever else was needed. The Memo group requested more watering cans, compost and materials for making a larger compost bin. Direct observation revealed that materials to make for these types of items are available locally. Participants should be encouraged to create what they need from local resources.

The Memo kitchen garden group explained that they had a community garden before the CARE project began. Therefore, they were already a functioning cooperative group. They gave the impression during the interview of a cohesive and successful group. This group could serve as a model for newly formed groups and provide important input regarding how they worked out any conflict or difficulties in the early phases of establishing their community garden.

Recommendations

The recommendations below outline steps for (1) increasing health department involvement in, and eventual takeover of, the evaluation and training of all PSF and (2) supporting empowerment in the community by providing enhanced health education through the PSF.

Communication with the health department

1. Review and clarify responsibilities and procedures for evaluation and training of PSF amongst all partners (CHC, DHS, MOH and CARE). This can be done by sponsoring a series of workshops, the first of which would involve clarifying procedures, establishing tools, assigning responsibilities and determining a timeframe for implementation. Three key issues to address during the workshop are use of the PSF evaluation form, securing funds for PSF training through DHS and establishing the role of CHC staff as mentors and supervisors of PSF. An important component of this first workshop will be to identify current obstacles to implementation and strategies for addressing them.
2. Follow up workshops should be conducted in order to check progress and address any new obstacles to implementation.
3. Identify CARE staff who will meet with counterparts at each level of the health department (CHC, DHS and MOH) on a regular basis in between scheduled workshops to check the progress of implementing the procedures identified in the workshop.
4. Submit quarterly reports and planning schedules to DHS and CHC

Support for PSF

5. Continue to provide regular refresher trainings to PSF in order to continually increase their knowledge and nurture their role as health educators in the community. This task is a critical component in empowering community members through education. Although it is a task that should ultimately be assumed by the health department, financial and human resource constraints mean that the capacity of the health department to support the educational sessions is still some time away.
6. Develop reference material that PSF can keep on hand in the aldeia such as laminated sheets with pictorial information they can review with illiterate community members or sections of Where There Is No Doctor which can be reviewed with literate community members. These materials can be compiled in a binder and kept by the PSF to be used as needed.
7. Review costs of transportation for each area so they can be adequately reimbursed for trainings

Education sessions

8. Make education sessions more of an "event" for women in the aldeia. Train the PSF to make the sessions participatory, active and engaging for the women. Employ techniques such as role playing, demonstrations, games with pictorial representations of information and songs about healthy behaviors that they can teach the children.
9. Put up posters with pictures of healthy behaviors to remind them of what they have learned – some of the posters can be cut up and the pictures can be used for games to review material.

Kitchen garden groups

10. Teach participants seed saving techniques to increase sustainability of the gardens.
11. Encourage participants to prioritize eating produce from the garden in order to support the health of their families and sell whatever is not needed by the household.
12. Review how to make watering cans and compost bins from locally available material.

Appendix I Project Details

The Integrated Health and Nutrition Project (IHNEP)

Dates of implementation: March 2005 – June 2006

Project Goal:

To decrease mortality and morbidity rates amongst the under-five children of Lolotoe and Atabae subdistricts where global acute malnutrition is significantly high.

Project Objectives:

1. Sustainable improvement of the nutritional status of children under five years of age and pregnant and lactating women in the targeted eleven sucos of Lolotoe and Atabae subdistricts.
2. Contribute to strengthening of first level health facilities to provide essential health services to children under five years of age and pregnant mothers.
3. Contribute to decrease in incidence of diarrhoea in targeted malnourished children through access to Safe Water System.

Activities:

1. Monthly growth monitoring and health promotion
2. Targeted supplemental feeding
3. Positive Deviance Enquiry and Nutrition Education and Rehabilitation Session
4. Support to make health facilities more functional
5. Safe Water System

The Reinforcing Health and Nutrition Action - Support to the Ministry of Health Project (REINHA)

Dates of implementation: January 2007 – June 2008

Project Goal:

Sustainable improvement in the nutritional status of vulnerable groups (children under 5, pregnant and lactating women) in three western districts of Timor-Leste: Liquica, Bobonaro, Maliana

Project Objectives:

CARE will support the Ministry of Health in conducting timely distribution of supplementary food to malnourished children under 5 and to pregnant and lactating mothers, accompanied by growth-monitoring and nutrition education programming

Activities:

1. Support to the MOH at the district level to finalize and maintain beneficiary lists of children under 5 and pregnant/lactating women eligible to receive supplementary food as per MOH standards.
2. Socialisation of local communities to the supplementary food distribution mechanism and criteria to be used.
3. Logistical support to eight CHCs through provision of vehicles and distribution staff

4. In conjunction with the MOH, conduct monthly supplementary food distribution and growth monitoring for children under 5 and pregnant and lactating mothers;
5. Conduct nutrition education sessions with target beneficiaries (malnourished children and care givers) in agreed locations;
6. Carry out necessary repairs to the CHC storage facilities;
7. Support the MOH with the development and dissemination of health information materials.

The Timor-Leste Nutrition Enhancement Project (NEP)

Dates of implementation: June 2008 – June 2011

Project Goal:

Sustainable improvement in the nutritional status of vulnerable groups (children under 5, pregnant and lactating women) in three western districts of Timor-Leste: Covalima, Bobonara and Liquica

Project Objectives:

1. Increased capacity of community health volunteers to provide community health and nutrition related services and outreach to communities
2. Increased capacity of MOH staff to provide nutrition related services to children under 5 and pregnant and lactating women.
3. Local communities strengthened to have sustainable improvement in nutritional status, using local solutions and improved techniques

Activities:

1. Provide technical support to the MOH to implement Growth Monitoring and Supplementary Feeding programs in Bobonaro, Covalima, and Liquica districts, through Community Health Centres and Health Posts.
2. Provide refresher training and monitoring and evaluation as needed to ensure that the activities are done according to the new nutrition guidelines and protocols.
3. Support MOH to implement SISCA activities: 120 identified Community Health Volunteers, who have already received initial training by CARE, will receive support and mentoring, as well as further training. Support on the job will be provided during SISCA activities and outreach to communities.
4. Provide logistical support to transport supplementary food, staff, medicines, etc to the SISCA posts where CARE will be working (40 village health posts)
5. Develop integrated nutrition activities in 9 targeted communities that will combine nutrition education, health promotion, identification and promotion of positive behaviours, and improve food availability (e.g. cultivation of kitchen gardens);

Appendix II Data Collection Details

Key informant interviews with health department staff

Respondents	District
Director of Health Promotion, District Health Services	Liquica
Director of Nutrition, District Health Services	Liquica
Vice Director, District Health Services	Liquica
Director, Community Health Center, Cailaco	Bobonaro
Vice Director, District Health Services	Bobonaro
Director of Health Promotion, District Health Services	Bobonaro

PSF group interviews

District	Sub-district	Succo	Aldeia	Total participants
Liquica	Liquica	Ulmera	Neran	3
Bobonaro	Cailaco	Meligo		3
Bobonaro	Bobonaro	Tapo		3

Mothers focus group discussions

District	Sub-district	Succo	Aldeia	Total participants
Liquica	Maubara	Vaviquina	Cameleramut	7
Bobonaro	Bobonaro	Oeleu		11
Bobonaro	Bobonaro	Lourba		8

Kitchen garden focus group discussions

District	Sub-district	Succo	Aldeia	Total participants
Liquica	Liquica	Dato	Lebuhei	3
Bobonaro	Maliana	Memo		10