

**EVALUATION  
AT CLINIC LEVEL**



## Introduction

The following chapters are intended in particular for those who work at clinic level. They attempt to provide practical guidance about planning and evaluating primary health care efforts in Third World countries.

We will make study visits to three nurses - Maryam, Bindu and Karin - in different rural clinics and see how they evaluate their projects. All three have attended a course and learnt some basic facts about evaluation. Enthusiastically, they return to their jobs, thinking:

*Now is the time to get started with it. . .  
What we learnt in the course is, after all,  
self-evident. It's surprising, really, that  
we didn't think of it ourselves. . . .*

The three nurses travel back to their jobs with the material from the course (presented in boxes in Part Three). They return to three totally different situations.

(Maryam, Bindu and Karin are fictitious characters, and their situations are also fictitious. But the material is based on reality

and experience of people like these three nurses, who represent three different work situations fairly typical of mission health care work.)

**Maryam** has recently been installed in Village A in an Asian country with the task of establishing a small health care clinic. It is not long since she was recruited by a mission working according to the community development approach. As she comes from another part of the country, she has some difficulty in understanding the local dialect.

A team of two field workers has already been on the spot one year. With the villagers, they identified the biggest problems: drinking- water and animal health care. During work on a water project, it emerged that the high mortality among women at childbirth was also a major problem. In addition, illness among the men caused big economic setbacks for their families. Compared to national levels, childhood mortality up to the age of 5 in the area was high - about 30% but this was not seen as abnormal by the community.

A health committee was formed on the advice of the aid workers and including them, but at initiative of the village elder. After long discussion, the committee decided to apply to the mission for a nurse to start up a clinic and meet some of the local health needs. It was agreed that the village would provide a house for the clinic and necessary voluntary labour while the mission would provide a nurse and the equipment. Medicines were to be sold at cost.

**Bindu** has worked for one year in Village B. She is a missionary from another Asian country and has spent the previous year learning to speak the language and familiarizing herself with the culture, as well as assisting at another clinic. She took

over this conventionally-run clinic in Village B situated in a mission compound from a nurse who had operated it on her own for about five years.

**Karin** returns to a small clinic (that has existed for some 10 years) in Village C. She arrived here three years ago but has been a missionary in the country for over 10 years and plans to return to her native Sweden the following year. She faces a tricky task since the mission has decided that the clinic should be closed and cease to exist on her departure. The main reason is that the government has now started a similar clinic in the next village and the mission has decided to support it instead of competing with its own clinic.

#### **What evaluation means, when to do it, and why**

By the concept "evaluation" is meant 1) systematic assessment of the effect of a particular activity ; 2) learning from results.

Evaluation can be divided into four steps:

- gathering of information
- analysis
- feedback to affected parties (work team, target group, superiors)
- application of the results

Ideally, one should evaluate one's work continuously so as to be able to improve it all the time, by:

- identifying problems and weaknesses in daily work routine
- noting progress and perhaps modifying strategy and routines (or, alternatively, proposing that the activities be terminated).
- assessing whether the aims are realistic in the light of experience
- providing feedback to the work team to stimulate, motivate and correct
- reporting to superiors, donors and the target group
- assessing whether the target group has benefited or is benefiting from the activities
- considering whether financial and personnel inputs are in reasonable proportion to the results (cost/benefit analysis)

If an effort is limited in time, as with a project, a final evaluation should be made to assess to what degree the aims have been reached, e.g. whether those intended to benefit have in fact done so. Some time after a project has been finalized, a further evaluation may need to be made to assess its long-term effects.

## What kind of a clinic?

Maryam is in her home with a map of the area that the schoolteacher has drawn for her. The village health committee has suggested that the clinic open in a building about one kilometre from where she lives. In front of her she has the course material, in which she has found some useful pointers for her work. (See box)



With the help of the course material, Maryam poses some questions:

- **What do I want to achieve with the planned clinic?**

After considering the question for some time, she writes down her answer in three points:

- reduced maternal mortality
- reduced infant mortality
- less illness in the whole community

- **What strategy shall we choose to reach these aims?**

The strategy has in fact already been decided: a clinic shall be opened and Maryam shall cooperate with other mission staff. The clinic is part of a wider strategy to improve the health conditions of the community as a whole by better environmental hygiene, better access to clean water and increased food production.

Within this framework Maryam can design her own individual strategy. But she realises that the aims and strategy must be worked out in cooperation with the people to be helped: the target group. After all, it is their health committee that has requested a nurse.

### How to evaluate a project at the planning stage

- When the aims are being formulated, you also decide which measurable indicators to use when evaluating the project.
- Field studies and interviews of different kinds are a good starting-point. You also note official statistics for morbidity, mortality, birth-rate and so on, insofar as they exist.
- Then you plan for gathering and recording of information during the implementation of the project. For example: daily statistics annual inquiries into the nutritional status of children aged 1-5 and number of working hours of certain staff when carrying out particular tasks.
- Decide also how the information shall be stored so as to be readily available. (*More on this on pages 69, 70, 73-76*)

### Popular Participation

In the village health committee Maryam's proposed aims are discussed. The discussion becomes more long-drawn-out than she expected as there are conflicting interests.

The health committee had expected an advanced clinic for curative treatment. Such a clinic would not only provide access to good health care close to home. It would also improve the whole reputation of the village and contribute to job possibilities in the area, as patients were expected to stream in from the surrounding districts.

Maryam, who had imagined a smaller clinic serving a smaller area with emphasis on preventive care, health education and so on, realizes that a lot of preparation and much discussion in the health committee will be needed before an agreement can be reached.

To be sure, the type of clinic the health committee wanted would improve the village's economy and good standing. However, experience shows that access to good curative health care does *not* reduce the frequency of illness or improve overall health conditions (although mortality can be somewhat reduced).

Maryam asks the members of the health committee to list the illnesses and health problems they need help with. The following list emerges:

- coughs and colds
- pneumonia
- tuberculosis
- diarrhoea
- measles
- complications at childbirth
- undernourishment ("children who dry up and die")
- tetanus
- whooping cough
- *intestinal worms*

Together they go through the illnesses that could be prevented by immunization, improved environmental hygiene, better drinking-water, preventive maternal care, training of traditional birth attendants, family planning, nutrition education, preventive health care, and so on. What remains are basically upper respiratory infections - coughs and colds - where prevention has little part to play.

This was new to the health committee. The realization opens new perspectives. Finally, after many long talks, it is agreed that the village's standing could be improved, if it succeeds in reducing illness and mortality with the help of a simple clinic and the preventive actions mentioned above. The village would be talked about as an example for surrounding villages. Also, reduced illness would increase work capacity and thereby improve the household economy.

It is also agreed to adopt Maryam's proposed aims. After careful consideration, a fourth point is added: that improved economy and a lower birth-rate would make it possible for the villagers themselves to take responsibility for the clinic in the future if its activities are kept "at a reasonable level". This decision is made easier by Maryam's assurance that patients could be referred for more qualified care to the hospital some four hours' walk from the village.

#### **So finally the aims of the clinic become:**

- to reduce women's mortality at childbirth;
- to reduce infant mortality;
- to cut down illness among the population as a whole;
- to train local staff in preventive and curative health care.

After five years the clinic should be handed over to the village and be run by local staff.



### Detailed planning

Now the more detailed planning for the clinic can start. The health committee provides Maryam with two volunteer assistants: one is the female teacher in the village and the other is a young man who has shown great interest during discussions in the health committee. These three are now responsible for working out a strategy to meet the aims and a detailed plan of work. Maryam has the medical expertise and the two villagers have local and cultural expertise.

In order to formulate a realistic strategy they inquire about other organizations or people who work with similar projects, or those that directly or indirectly influence people's health in the area. They seek ways to collaborate with them.

To achieve less illness and mortality among the population they decide that the clinic's work should be geared to the following tasks:

- **Preventive action among the most vulnerable groups in society:** children under five and pregnant women. Monitoring of children's growth rates, teaching of nutrition and treatment of simple ailments. For pregnant women: blood pressure control, urine tests, palpation of the uterus, dietary advice and, when needed, extra iron and vitamins. Teaching about pregnancy, delivery and family planning. In addition, traditional birth attendants will be offered certain training so as to raise their status and level of knowledge. These actions should reduce both perinatal deaths and maternal mortality.

- **Simple curative care for all ages.** Spreading knowledge about simple but life-saving household remedies like oral rehydration against diarrhoea and "super porridge" against malnutrition. ("Super porridge" is a nutritious gruel prepared from one part wheat, one part maize and two parts soya beans, which have been dried and ground into flour.)

• **A functioning system of referral to the hospital.** To achieve this, the team visit the hospital's outpatient department and talk with the staff. A cooperation committee is created with representatives from both the hospital and the clinic so that any problems that might occur in communications between them can be dealt with immediately. To begin with, the committee will meet once a month; later, when the system has begun to function, 2-3 times a year.

To achieve the aim of training local staff it is decided that, already from the beginning, two villagers will be involved in the work of the clinic. They will learn simple routines like weighing, registering, handing out of medicines, as well as some health education. At the same time, the health committee starts to think about who might be selected to be sent for training and eventually take over from Maryam.

So that it will be possible to hand over the clinic to the village, it is realized that a level of care must be selected that can be maintained by local staff after Maryam has left. It is considered likely that one or two students can be sent for training as village health workers, though there is no chance in the foreseeable future for training at a higher level. Therefore, the clinic shall not offer more advanced health care than a village health worker can provide.

Similarly, the equipment should be limited to what the village can afford to maintain. Therefore it is decided to procure only the most necessary basic medicines and a basic kit of very simple instruments.

It's soon evident that the need for information is fundamental. Data and statistics should

be gathered as the work proceeds, in order to do the following:

- identify problems and weaknesses in daily work routines;
- note progress and failures and learn from them;
- make priorities and perhaps modify strategy and work routines;
- provide feedback to the work team to stimulate, motivate and correct;
- report to superiors, donors and target group;
- assess if the target group has benefitted as intended from the clinic;
- assess if financial and personnel inputs are in reasonable proportion to results (cost/benefit analysis).

What information is needed for this, and where can it be found? How can you know whether or not the aims have been reached? What measurable indicators are there?

### Objectives and indicators

To assess if mortality and illness have declined in the village, Maryam and her assistants need to have a point of departure. They have the advantage of working within the context of a larger project where an extensive field study has already been made. So they already have statistics on maternal and infant mortality as well as on illness in different age-groups.

To follow up these data a new, field study will be needed in three years time. Until then the effectiveness and quality of the clinic and its services will be assessed by its effect on the health status of the population.

(Maryam has learnt at the course that childhood mortality is reduced when children aged 0-5 years have access to regular health

care, an immunization programme and monitoring of growth rates; that regular monitoring of pregnant women will reduce perinatal illness as well as maternal and infant mortality; that regular use of family planning will result in fewer births and improve the general health condition of mothers and children; and that health education given by an enthusiastic health worker, relating to real needs and with practical realistic solutions can improve attitudes and habits.

On the basis of the overall aims of the health committee, Maryam and her colleagues formulate objectives, such as the following:

- in the first year, 30 percent of children under five to be immunized; during the second year, 60 percent; in the third year, 90 percent.
  - at least 50 percent of children under five to be reached by the clinic's preventive health care work during the first year.
  - 30 percent of pregnant women to be reached by the clinic's prenatal service during the first year. (This percentage is calculated on the basis of the expected number of pregnant women in the population at any given time.)
  - all women visiting the clinic receive information about family planning.
  - all parents visiting the clinic hear about treating diarrhoea with oral rehydration and malnutrition with "super porridge".
- **number of children under five who have visited the clinic** divided into age groups, as well as first and return visits, so as to be able to assess how many in the target area have used the clinic during the first year.
  - **number of malnourished children**, as well as borderline cases, among those who have visited the clinic at least once during the first year. (These figures can be compared with those obtained for the whole area. Undernourished children are at risk and if you want to give priority to them you should have a higher proportion visiting the clinic than in the society as a whole.)
  - **number of first-time visits for preventive care during pregnancy.** (This figure can be compared to the number of pregnant women you can expect to find in the population, according to national birth-rate statistics).
  - **number of second and third visits**, with the objective that women shall make at least three visits during pregnancy.

In order to assess whether these objectives have been reached you need to have the following information:

- **number of vaccinations given at the clinic**, broken down if necessary into first, second and third doses, so as to assess how many are fully protected from different illnesses.

In addition there is interest in the numbers of registered pregnancy complications, the number of visits for curative treatment, according to sex and age-groups, the number of hospital referrals and the number of written referral responses received from the hospital.

In order to obtain figures as a basis for comparison during the coming years, Maryam also wants to gather some further information.

- number of babies delivered by traditional birth attendants who have received further training.
- number of newly-registered patients who accept some form of family planning.

- distribution of the most common illnesses among those who have come for curative treatment.
- numbers of those in charge of child- ren under five who have received health education.

### Data collection

Maryam and the two health volunteers realize that they will need statistics from the clinic and Maryam starts to develop forms for daily use. During the course the participants learnt about forms for collecting statistics (*see box*).

#### Forms for collection of statistics

The following points are worth bearing in mind when drawing up questionnaires for gathering statistics:

- The forms should be easy to fill in (i.e. demand as little work as possible). For example, it is easier to tick off something than to write a whole word.
- You should carefully consider what information you are interested in and collect only that. But look ahead and include information that will be needed as a basis of comparison in later evaluations. If you have a clearly-defined target area, you should ensure that patients from outside the area can be separated statistically.
- All terms used should be defined so that everyone using the forms interprets them in the same way.

(It is, for example, misleading to have, as a possible diagnosis, "amoebic dysentery" and "bacterial dysentery": the choice between them will be arbitrary. It is therefore better to have an overall diagnosis such as "diarrhoea" or "digestive disorder". But if the aim is to teach the staff differential diagnosis, e.g. to distinguish between upper respiratory infections and pneumonia, the distinguishing feature should be clear and simple i. e. respiratory rate per minute with pneumonia being diagnosed with a rate above 50/min above the age of 1 month (60/min below 1 month. )

- It can be useful to leave one or two columns empty in case you want to temporarily separate out any other illness, e.g. during an epidemic or for some special research project. One or two empty columns can also come in handy if, in the future, some new immunization is added.
- A paper containing definitions should be put in a plastic envelope and kept close to where the forms will be filled in.

The forms they develop are shown in appendix 6, which include examples of a way to keep track of pharmaceuticals used. By using them the clinic staff learn something about the number of patient visits per day, broken down by category and age- group, and reasons for visiting the clinic, the number of hospital referrals, distribution of illnesses among those who visit the clinic and daily use of pharmaceuticals.

Yet it was difficult to be sure at the end of a day whether a patient had been "crossed off" or not, or even "crossed off" twice, due to the intense activity and heavy number of patients at the clinic. Also, adding up totals from

different forms after a heavy day was a source of errors.

For these reasons, Maryam decides to write round to some other clinics, including Bindu's in Village B, to ask if they have encountered similar problems and whether they have developed better forms to overcome them.

*(The story about Maryam and her team continues on page 84. We move on to Village B, where Bindu is busy investigating for what purpose she can use the statistics gathered during all the years that the clinic has been operating.)*



*Accurate statistics in a crowded clinic is not easy.*  
PHOTO: KERSTIN DAHLIN



## How best to meet needs?

As nobody thought of evaluation when the Village B clinic began, there is no obvious starting-point. After her first year at the clinic, Bindu decides to dig into the files, which are full of statistics and documentation of different kinds.

The aims have been "woolly". In the correspondence files Bindu finds a letter to the headquarters asking for money and staff to start a clinic so as to take the weight off the mission wives, who every morning had the verandah full of waiting patients.

The money came and, over the years, the clinic grew to include both dispensary and maternity ward. So the mission started a process of satisfying a seemingly unending need. Any aims beyond that had not been formulated, as the pressure of everyday work left little time for reflection.

Following her course, Bindu wants to make an evaluation (*see box on p. 72*) so as to find the answers to a number of key questions:

- There has been talk about expanding the clinic, as it has confined premises. But would adding to the buildings (and increasing the work) really be desirable or would it be preferable to prevent illness more efficiently and thereby reduce the need for treatment?
- Many children return with the same illness over and over again. In the waiting-room, every day there is teaching about nutrition, hygiene and so on. Is curative medicine and health education in the clinic alone the best way of improving the children's health status, or should other ways of working be found?
- Are the costs for the clinic and the benefits from it for the local population in reasonable proportion to each other?
- Are the most needy being reached?

**How do you evaluate in the middle of a project if aims and evaluation have not been envisaged from the start?**

- Remember to keep ambitions at a realistic level: do what you can with what you have
- Identify what should be evaluated
- Make an inventory of information available at the clinic.
- Speak to affected parties (staff, target group, political leaders and other key people) and "tune in" to the opinions of "ordinary people" about the clinic
- Make a field study so as to:
  - investigate certain factors that are known indicators of a clinic's efficiency, e.g. vaccination coverage of the 0-5 age group;
  - map the present situation and thus obtain a "starting-point" as a basis for comparison, both for ongoing and any future evaluations. (The results obtained from the field study can be compared to national averages for the whole population, e.g. rates of birth and infant mortality.)
- Analyze and interpret the information gathered
- Plan how evaluations in the future should take place by deciding which measurable indicators should be used and adapting the forms for statistics so as to suit the new needs. When doing so, bear in mind the following :
  - eliminate the risk of inaccuracy in statistics as far as possible;
  - adaptations should not be so great as to render it impossible to compare new figures with the old;
  - avoid the gathering of unnecessary information, especially if it is time-consuming;
  - when adapting the forms, bear in mind not only the ease of gathering data but also the ease of adding them up.
- Last but not least, you need to decide at the outset how you are going to store data.  
(See box on page 74)

Bindu wants to study the clinic's effectiveness at confronting local health problems and notes the following measurable indicators:

- the extent of immunization coverage for 0-5-year-olds;
- the percentage of children aged 0-5 who come for health check-ups;
- the percentage of 0-5-year-olds registered at the clinic (those who have a health card);
- the percentage of pregnant women who come for a check-up at least once during pregnancy;
- the percentage of deliveries that take place at the clinic;
- how useful the health education has been.

She is also interested in the cost in relation to the benefits of the clinic for the local population. What is provided for the money spent? The indicators here are the costs of running the clinic and the extent to which it has been used in combination with the population's subjective assessment of the clinic, which is not measurable but which can still provide a certain understanding.

Finally, she wants to look closer at who the clinic serves. Measurable indicators here are how the patients can be categorized socially, economically and ethnically and how these groupings compare with the actual breakdown of the population in the area.

Bindu puts forward her proposals to her mission colleagues, including the staff of the clinic. The idea of making an evaluation is also discussed with the local congregation. As there is no local health committee, further consultation with people in the area (the target group) is postponed.

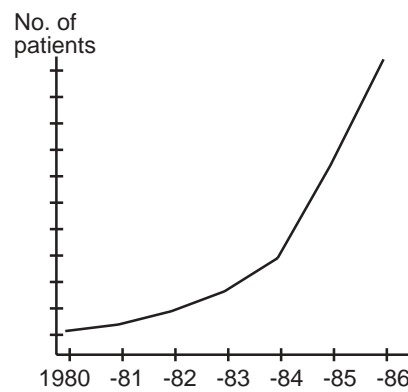
#### How to gather information for evaluation and how to analyze it

- Different ways of gathering information are:
  - from statistics of everyday work and the book-keeping;
  - through group talks with the staff;
  - by field studies;
  - by observation;
  - through group talks with target group representatives (work-shops etc).
- When analyzing information it is necessary to
  - assess the reliability, sources of error, and so on;
  - try to answer relevant questions with the information gathered. If alternative answers exist, these should be presented and the answer considered most likely indicated - with reasons;
  - on the basis of answers to the questions, try to reach reasonable conclusions.

The mission decides that Bindu should start the evaluation process by analyzing existing information material: statistics from the clinic, yearly reports to headquarters, and so on. To do so, it is necessary for her to be freed from daily responsibilities and to put aside adequate time. So she delegates the day-to-day running of the clinic to another member of the team but keeps herself

available for consultation; then she starts her analysis of the statistics:

- **Number of patients per day.** Bindu looks at the total number of patients for each 12-month period since the clinic opened and perceives that the number has steadily risen each year, at first slowly then faster and faster.



A first conclusion is that, if the number of patients increases each year, there will be yet a further increase the following year. This will affect the need for pharmaceuticals and for personnel.

*But why does the number of patients increase? Does the clinic become more popular or is illness increasing? Or is it a combination of the two?*

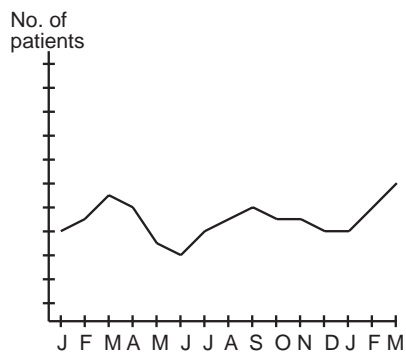
- **Distribution among the age-groups.** Bindu discovers that 1-5-year-olds account for the largest increase.

*Are children more ill now than five years ago? Or are there any other reasons?*

- **Number of children coming for vaccination.** A small increase during the first 3 years is noticeable and a marked increase the fourth year.

*Why the sharp increase the fourth year?*

Finally Bindu makes an analysis of the total number of patients per month. (*See graph.*) She then obtains a curve that is repeated each year, with the frequency of visits to the clinic peaking in March and August. She realizes that she can make use of these curves when planning staff holidays, etc. The highest density of personnel is needed in March and August.



Bindu is also interested in finding out whether any special illness is responsible for the peaks or if the troughs are due to people being busy in agriculture (sowing, harvesting), so they "don't have time" to be ill.

The data also tell her that the proportion of clinic visits by 0-5-year-olds for the sole purpose of a health check-up has increased during the most recent years. This is interesting in that the increase probably reflects an increased awareness of the value of vaccinations and growth monitoring during early childhood.

While she is working with these figures Bindu realizes the importance of the statistics being as accurate as possible as they are the basis for assessments that will influence future work. She decides to look closer at the collection of data and discovers that filling

in forms correctly is rather difficult. In a clinic humming with activity it can be difficult to remember whether a patient has been "crossed off" or not. Some, she reckons, are probably "crossed off" twice, others not at all. Are the statistics at all reliable?

### How to store statistics

- Compile the data gathered at the end of each day;
- Make copies of a monthly report of the daily statistics, enough for the clinic itself, mission HQ and, where appropriate, the government health inspector;
- Keep raw data from the daily clinics in a special place if it contains information that is not in the monthly reports (it can be useful for later evaluations and research);
- Make a special file for the monthly report, with clear divisions between each calendar year;
- At the end of each year, draw out relevant information from the monthly reports to make tables and graphs, which are placed so that when you open the file at, say, 1989, you first get an overview from the tables and graphs and then the 12 monthly reports;
- Make tables and graphs in the same scale each year, so that they are comparable;
- To follow certain factors of special interest, e.g. the number of patients visiting the clinic or the prevalence of a certain illness, make a continuous graph that is filled in each year.

Such graphs can be made in a large format and placed on the wall, either in the staff room (if there is one) for the interest of the staff, or in the waiting-room (if there is one) for the interest of the public.

REPORT.....MONTH.....																
										NAME	TOTAL	////	1/5	2/5	3/5	TOTAL
	✓	✓	✓	✓	✓	✓	✓	✓	✓		6		20			
		✓	✓	✓	✓	✓	✓	✓	✓		6		24			
			✓	✓	✓	✓	✓	✓	✓		4		12			
											0		3			
									✓		1		1			
	✓	✓	✓								3					

Bindu changes the forms so that each patient is allocated one line. The name of all patients, as well as their age and sex, are marked on their arrival. On their departure, additional marks are made, indicating illness, vaccination or whatever applies.

To further eliminate faulty registration, the forms are made so that they can be placed *side by side* for the purpose of summing up the day's data, and quickly transferring it to the monthly data sheets.

Also, when the forms are placed *one on top of the other*, showing only their right hand edge, with the totals, the distance that the eye needs to travel is very short (only 1-2 centimetres). This eliminates a lot of the risk of transferring the figures incorrectly.

To motivate the staff, Bindu gathers them to talk about statistics in general and the new

forms in particular. For that talk she has made an "outline lesson". (See Appendix 7)

There are considerable advantages in studying the data routinely collected at the clinic. You can:

- predict an increase the following year and so budget more realistically, in order to avoid deficits and overworking the personnel;
- determine in which age-group the largest increase lies;
- know when the clinic has the largest number of patients and thereby plan for a higher staff density at these times;
- improve routines for registration of patients.

**Running costs.** Bindu tries to calculate what it costs to run the clinic, i.e. what it would cost the local congregation to do so.

During the past year she has kept the books for expenses of different kinds:

- Pharmaceuticals	.....
- Bandages and syringes	.....
- Replacement of worn-out instruments	.....
- Detergents and cleaning materials	.....
- Fuel	.....
- Rent	.....
<b>TOTAL:</b>	.....

To this must be added staff salaries. Bindu estimates 12 months' salary plus holiday pay plus all additional benefits for every employee. She then adds the salary of a nurse (her eventual replacement):

- Salaries	.....
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Whitewashing of the premises is needed annually and a change of straw for the thatched roof every third year.

- Whitewash	.....
- One-third of the cost of thatching	.....
<b>GRAND TOTAL:</b>	.....

The grand total is the figure to set against the benefits that the local population receive, or at least say they receive, from the clinic.

The cost of pharmaceuticals becomes arbitrary, of course, if you count only those that have been bought during the year, as some were part of the stock. In order to obtain a more correct figure, an inventory of the stock should be made at the beginning of the year and, on the same day a year later, a new inventory. The clinic's need for pharmaceuticals is then estimated as follows:

Value of stock at beginning of year plus value of new purchases during the year minus value of stock at end of year.

## Group discussion

Bindu decides that it is time to continue her discussions with the locally-recruited staff, who often have insight into the chain of cause and effect as well as cultural knowledge. As many of them have their homes in the area, they also represent the target group. Ideally, though, she would also like to talk with members of the target group.

As a first step, she gathers the clinic staff for a group discussion of the shared work. Originally, they considered that the purpose of the clinic was :

- To make health care available for those who need it.

When talking further about this, it was agreed that it would be even better if people could be prevented from falling ill, so another reply was formulated:

- To reduce illness and thereby reduce mortality among both children and adults.

Has the clinic had that effect during the six years of its existence? As it has no statistical starting-point, the question can't be answered unless reliable information can be obtained from a government body or another organization.

Together they reflect on the questions that emerged when they looked at the statistics:

***Why does the number of patients increase? Is the clinic becoming more popular or are people becoming more ill? An increase during the first two years could be explained by a gradual winning of people's confidence, but why do numbers continue to increase after six years?***

Several possible answers emerge:

- People are more aware of the existence of the clinic and that they can obtain help from it;
- People are losing confidence in traditional healers and come to the clinic instead;
- The population in the area is increasing, partly due to a high birth rate, partly to immigration into the area. (A group of 300 people were moved into the district as a result of a natural disaster.)
- People have realized the value of vaccinations and come for them.

#### **Are children more ill now than five years ago?**

As to why more children come to the clinic, the staff offer two possible explanations: an increase in numbers coming for vaccination and an increase in children with symptoms of Vitamin B deficiency (due to increased use of polished rice since the advent of electric mills).

#### **Why did the number of children coming for immunization increase so strongly the fourth year?**

The staff have a likely explanation for this. They remember that the introduction of polio vaccination filled the waiting-rooms. Mothers had come to see vaccinations as something of value and polio was a dreaded illness.

#### **Is there any special illness that accounts for the peaks?**

Yes. The staff point out that March (during the cold season) is the time of year when upper respiratory infections and pneumonia are most common. August (in the middle of the Monsoon) is the month when diarrhoeal illnesses flourish the most.

But it is also pointed out that, at the rice planting, there is no time to go to the clinic and those who are ill are simply left at

home. If the rice isn't planted on time, it can mean starvation for the whole family.

It is clearly very worthwhile to sit down and discuss things with the staff. In this way several of Bindu's questions have been answered.

The information about the operation of the clinic is noted on a special **information sheet**. On a second sheet, the **question sheet**, queries that remain unanswered are noted and on a third, the **proposals sheet**, suggestions for actions and changes that the staff have considered.

#### **The current question**

The big question facing the team, as well as the mission and the local congregation, is: *Should the clinic be expanded in response to the increased work load or should other solutions be sought?*

From this question others follow:

- Does the clinic meet a real need among the population?
- How large a part of the population uses the clinic's services?
- How do people see the clinic?
- Do they accept the health care that is provided?
- Has the clinic's existence in the area led to improved health?
- Are the poor, the most needy, reached?
- Is the clinic a practical expression of the gospel concerning justice, equitable distribution of resources and the equal value of all people?
- What would happen to the clinic if the mission were to leave the country?
- Is it appropriate to expand, reduce or end the clinic's operations? What would be the consequences?
- How does the clinic fit into the national health plan? Does it complement or duplicate the government's health-care programme?



- Which organizations (including the state) in the area work with projects that promote health? What are the possibilities for cooperation and exchange of information with them?
- Is the level of care adopted by the clinic the most appropriate for the health problems it tries to solve?
- How well does the referral chain between different levels of health care work?
- What is the cost of the different services?
- Is the order of priority in the use of resources reasonable?
- To what degree is the local church ready to take on responsibility for the clinic?

There are answers to some of these questions. The team writes them down on the information sheet and systematize the information so as to make it easier to compile later.

The following questions, to which the team will together try to find the answers, are noted on the question sheet:

- How large is the reception/catchment area?
- How is the target area to be defined?
- What is the amount of illness in the target area?
- How high is mortality in the target area?
- What percentage of the sick come to the clinic for treatment?
- Which illnesses are the biggest problems in the society?
- Which are the most common causes of death among children?
- What percentage of children aged 0-5 have complete vaccination protection?

To answer the first and second questions, a map of the area is put up at the clinic on which dots are placed to represent the places

from which the patients come. When patients are registered, the staff ask for their address and, at the end of the day, they transfer this information to the map.

The area corresponds roughly to the administrative district. Eighty-five percent of the patients come from the district; only 15 percent from outside it, at a walking distance of two hours or more. The staff agree that the district is a suitable target area and that it would be a good thing to discuss this with local politicians.

### Field study

Data gathered at the clinic reflects the situation of those who come for treatment, but not the health condition of the whole population. Bindu proposes and the mission agrees, to make a field study that will answer the remaining - unanswered - questions and provide a starting-point for a comparison at a later stage.

Two villages are selected for the field study, one in a mountainous area and one closer to the nearby lake. Ten percent of the households are randomly selected, and work starts on a questionnaire. (See Appendix 4).

Bindu sends a copy of the questionnaire to Maryam and asks her to show it to her colleagues, who have already made a field study, for comments; she also asks whether some of them can come to help prepare the field study and train members of the staff.

Bindu and her colleagues discuss who needs to be visited locally to talk about the future work of the clinic. They draw up the following list:

- the government's local health inspector, to talk about possibilities of cooperation;
- the government's local development project concerned with agriculture and water, to talk about cooperation and exchange of information;
- political leaders in the villages closest to the clinic, to talk about its work and participation in the field studies;
- church leaders, to ask how they see the clinic's future.

*(We leave Bindu and her colleagues to move on to Village C, where Karin lives and works. The story about Bindu continues on page 85)*



## Planning positive changes

In Village C Karin has received temporary help from a good friend, a nurse, who will stay about four weeks. This gives her time to reflect and plan.

The decision to close the Village C clinic has been taken by the mission board, in consultation with Karin. Before the decision was taken, she had had talks with responsible authorities in the district, that is, the staff of the local government health office under whose authority a new district clinic had been opened.

Karin knew that competition for the patients, which easily occurs in such situations, and the resulting tension and rivalry between staff, have a tendency to increase over time. In addition, the government clinic is often at a disadvantage, as the mission clinic usually has larger financial and staff resources.

If the government is ready to take responsibility for health care in the area, this is in the long run something positive for the population, and deserves support.

The original reasons for starting the clinic were that the mission considered there was a need for health care - there were no facilities for those who fell ill - and in order to give a practical demonstration of what the gospel is all about.

Now the position has changed. The government has also opened a clinic and the population is no longer without medical care; also, there is now a congregation in the neighbourhood that spreads the Christian message.

Therefore, to close the mission clinic and support the government clinic is perhaps a better demonstration of what the gospel is all about.

Karin is keen to ensure that both staff and the local population see the decision as a positive one and that they will support the new clinic. She also wants to make some kind of evaluation, in order to learn from the experience of running a mission clinic.

The first thing she does is to contact the health inspector in the local town who is responsible for the new district clinic. She informs him of the decision to close the mission clinic and support the government one. They agree that the closure should not happen suddenly; during a transition period, the patients at the mission clinic would be informed about it as well as about the new clinic.

They also agree that the nurses at the new clinic would each spend two weeks at the mission clinic as a step in their further training. This would also give patients a chance to get to know the new nurses, which would make it easier for them to attend the new clinic.

Concerning the planned evaluation, the health inspector is interested in knowing the results. He also makes a point of mentioning that there are a couple of vacant posts at the government clinic open to applications from the mission clinic staff.

#### **Talking it over**

Karin then brings the staff together to discuss the future. The first questions that arise are: What will happen to us? Will we lose our jobs? Different possibilities are discussed. Karin assures them that the mission of course will do all it can to help them. There is the possibility of applying, in competition with others, for the vacant posts at the government clinic. Moving to another mission clinic in the country is further possibility.

After that they talk about how the closure should be carried out and finally about evaluating the work. Together they study the material Karin brought home from the course. (*See box.*)

#### **How do you evaluate if you are in the final phase of a project and an evaluation was not part of previous plans?**

- Remember to keep your ambitions at a realistic level: do what you can with what you have.
- Make an inventory of existing statistics.
- Talk to the affected parties: staff, representatives of the target group, headquarters, and so on, about how they have perceived the function of the clinic.
- Analyze the different activities included in the project and assess if they can:
  - be finalized without harming the target group.
  - be continued by the target group, or
  - handed over to another organization, authority or similar for follow-up.
- Obtain information about the availability of services in the target area and the degree to which they are used. For example, if polio vaccine is available, what percentage of children aged 0-5 years in the target area have been immunized against polio?
- Analyze and interpret the information gathered and draw conclusions from the answers to the following questions:
  - to what degree have the aims been reached?
  - how have living conditions of the target group been changed?
  - what have the effects of the clinic been on the society as a whole?
  - how many benefited from the clinic?
  - did the clinic have any non-intended effects?
  - what lessons were learnt from the clinic?

The next step is for Karin and a colleague to visit the government clinic. To start with, the staff of the new clinic are quite reserved, but politely show the guests around. Karin expresses her appreciation of several good things that she sees. In time the atmosphere eases and they have quite a long talk about how the mission clinic staff could support the new clinic.

The first thing the government nurses ask for is instruments, as their clinic is badly equipped due to limited resources. The mission clinic, as it closes, could very well part with some of its equipment. Before Karin and her assistant return, it is agreed that the staff of the government clinic would return the visit in a few days. The employment possibilities are discussed and it is agreed to take this up again with the health inspector.

### Gathering information

Karin now starts to compile the information to which she has access.

Not much is known about the starting-point. National figures for the year the clinic began indicate that infant and maternal mortality were high. The annual report shows that there were no latrines in the area.

Existing statistics from the clinic provide information about the following: the number of patients per day, broken down by age-group and category, the number and proportion of children who are malnourished, well-nourished or on the borderline, the number and proportion of children who come only for a health check-up, the number of patients who have certain specified illnesses, the number who have been referred to hospital and who have received health education individually or in groups and, finally, the number of "Road to Health" cards that have been issued.

To these statistics are added others about costs: rent, salaries, pharmaceuticals and other expenses, as well as national figures for perinatal mortality, maternal and infant mortality, birth-rate, mortality, etc. and population statistics for the district and other nearby districts.

During a two-week period, the staff find out where the patients come from and dot a map accordingly. It turns out that about 80 percent of patients come from the administrative district of the clinic and two nearby districts. Twenty percent live beyond these three districts and have more than three hours walk to the clinic. This gives an idea of the size of the catchment area. But as the clinic mainly serves the three nearby districts, it is decided to consider them as the target area.

As there is little access to information about health conditions in the area at the time the clinic opened, there is not much point in making a detailed field study at this stage. Instead, answers to questions about how people have perceived and used the clinic's services, attitudes, experiences and problems and so on, are sought through semi-structured talks with different groups of people. The staff visit places where people naturally gather, e.g. the tea shop, the water source or other places where there can be time for a chat.

The key questions to be answered are written down as a reminder.

- Do people know about the different services of the clinic? (E.g. immunization, child care, curative care, maternal health care, family planning, health education.)
- Have people used these services? (If not, why not?)

- Are the services offered by the clinic acceptable? (If not, why not?)
- Have attitudes to health, hygiene etc changed during the time the clinic has been operating? If so, how?
- What has been the greatest benefit from the clinic? (Reasons?)
- What has been the greatest problem with the clinic? (Reasons?)
- Have overall living conditions changed? (If so, how?)

*(If the decision to close the clinic had not already been made, three further questions could be put:)*

- What do people think the consequences would be if the different services of the clinic were to be withdrawn?
- What could the district then do about providing health services?
- Which alternatives to the present clinic are acceptable?

It is then decided also to interview political leaders and village elders so as to obtain answers to the following questions as well:

- Which major changes (positive and negative) have taken place in your district in the past ten years?
- Do you consider that people in general have it better, or worse, now? What have been the contributory factors?
- Do you consider the mission clinic has brought about any changes in the society, positive or negative? If so, what have they been?
- What changes in society do you consider necessary to improve people's living conditions in the future?
- Which ethnic groups are represented in your village?

Before visiting the villages, Karin gathers the staff for a "trial run" so that everyone can become thoroughly familiar with the questions and practise different ways of posing them in discussion with people.

*(The story about Karin continues on p.90)*

PHOTO: JOSEPHINE CARLSSON



*Demonstration in nutrition teaching.*

## Adapting to change



We now return to Village A, where Maryam and her team have had the clinic running for a couple of months. During the first two weeks they had a surge of patients, more than 100 a day. Then the numbers started to fall off and stabilized around 40 a day. (This is quite common at the beginning, when many come out of interest and curiosity. There can also be a dammed-up need.)

The staff, who were recruited locally, have commented that most of those who come to the clinic are from the higher social levels, in spite of it being situated in an area where many poor families live. As there is good reason to believe that the poor families have the greatest needs, this situation troubles them. It is decided to talk with the health committee about it.

The staff study the statistics for the previous two months. They discover that 30 percent

of the children in the target area have visited the clinic by comparing the number of new visits of 0-5-year-olds to the total number of children in that age group, as follows:

$\frac{\text{New visits of 0-5-year-olds} \times 100}{\text{Total number 0-5-year-olds}} = \text{percentage of children who visited the clinic}$
--

Only a few of these children came for a health check-up; almost 85 percent came for treatment of different kinds of illness.

They draw the conclusion that the target group has not felt the need for preventive health care, vaccinations etc. as much as the need for curative care. As they don't want the clinic to become known as an institution for treating illness but rather as a health centre, they realize that they have to do something about it right away. What must be done is to reach out to the grass roots with education and information.

When the health committee meets, observations made at the clinic are discussed. Someone points out that the reason why the underprivileged fail to use the clinic could be that they can't afford to pay for medicines. Another reason could be that they can't afford to take time off from work: waiting-time at the clinic is too long.

It is decided that the committee should spread the word about the purpose of the clinic in

their own villages, above all about the preventive aspect. But this is not enough. Someone from the clinic needs to visit the villages, and perhaps in particular the poorer families, so as to explain that the services of the clinic are open to them.

Following the committee meeting, the small group who worked out the strategy get together. They agree to:

- inform about the clinic at the school, where 65 percent of all families have one child or more.
- ask for additional funds for a further person during a three-year period so as to have adequate resources to go out to the villages and teach.
- inquire into the possibilities of subsidizing medicines for those who have difficulty in paying for them.

So Maryam and her team already after two months have used the statistical data to identify weaknesses in the strategy, which allows it to be modified at a relatively early stage.

Maryam now receives an answer from Bindu, with examples of revised forms for registering patients (that have been introduced in Village B), which they see will solve some of their problems with the old forms. So they decide to adopt them also for the Village A clinic.

### Preparing for change

In the meantime Bindu has visited the different persons and institutions on her list. First she went to the government health inspector, who was not very welcoming to start with. From what he said, and from what she understood "between the lines", came the realization that the mission clinic had such a high standard that the authorities



couldn't compete with it. The result was that the authorities had begun no type of health activity in the mission clinic's catchment area.

Bindu said that, as a foreigner, she was very interested in learning both about traditional medicine and the Ministry of Health's health plans for the nation. They talked some more and then she invited the inspector to visit the mission clinic.

Following several visits, Bindu and the health inspector in time become friends. They begin discussing interesting aspects of the government's health care plan, including the work of village health workers, who go from house to house teaching nutrition, oral rehydration, family planning etc. as well as following up tuberculosis and leprosy patients.

The visit to the local office of the government's development projects is considerably easier. The staff there are happy to tell about plans for water projects and show Bindu the pilot project cultivation area. They discuss cooperation concerning environmental hygiene in the villages where water pipes are installed.

They decide to share information material,

and also that a demonstration latrine should be dug next to the clinic. The clinic staff should visit the project cultivation area to familiarize themselves with it so that they can recommend patients to visit the vegetable field and, hopefully, benefit from it in their own fields.

This cooperation opens new perspectives. Bindu returns home full of expectations. To fight undernourishment and diarrhoea on several fronts at the same time - that must bring results. She promises to send copies of statistics and annual reports so as to keep the development project staff informed about the local health situation.

Then Bindu and a colleague visit the various political leaders in surrounding villages to find out about attitudes towards the activities of the clinic and to ensure their participation in a possible field study.

The way they are received varies. On the whole, the leaders are positive to such a study, especially if they are given access to facts and statistics concerning their own area. Some spontaneously offered to help by providing local "volunteers".

Finally, the visit to local church leaders. Bindu already knows them well and is soon able to come to the purpose of the visit. If the mission for one reason or another cannot remain in the country, to what degree could the local church contribute to the clinic? Could the church take over the total financial responsibility?

The questions take the church leaders aback. They have not reflected on the possibility that the mission would not provide economic support in the future. The result of the discussion is that a dialogue begins around these questions.

(When the government, several years later, takes over the mission clinic the church helps with certain voluntary contributions. Among other things, it takes on responsibility for subsidizing the cost of medicines for poor families, and also provides health education in the waiting-room.)

### Field study

As a result of Bindu's inquiry to Maryam, a group of mission staff with expertise in making field studies arrive. They participate in the training of personnel and in the designing of questionnaires.

The form is examined and a lot of emphasis is given to redesigning it so as to make it easy to compile figures afterwards. The questioning technique is also rehearsed. For it to work using several interviewers it is important that the questions be put in a similar way. Also, leading questions should be avoided.

The staff then set out one afternoon to make a pilot test with the redesigned form. They return with some 20 completed questionnaires and richer in experience. Certain questions where it was difficult to obtain answers are reformulated and one or two questions deleted.

The field study is carried out in the following weeks and the results compiled. As the staff are involved from the beginning, there is no lack of interest in the work.

An analysis of the results of the field study includes the following findings:

**Immunization:** 34 percent of 0-5-year-olds had complete coverage; 21 percent were partly immunized and 45 percent had no immunization at all. The figures should have

been higher, with at least 60 percent of the children being fully immunized.

**Nutritional status:** 12 percent of 1-5-year-olds were undernourished, 23 percent were borderline.

These figures are worse than the averages for the whole country. As there is no starting-point, it is impossible to know whether the proportion of undernourished children had risen or fallen. But these figures are kept so as to provide a comparison for the next study.

**Attitudes to the clinic:** 80 percent said that they first contact traditional healers or herbalists when someone in the family is mildly ill; 15 percent said they go to the mission clinic and 5 percent didn't answer.

However, 50 percent said that, when seriously ill, they go to the mission clinic, 8 percent said they turn directly to the government hospital, while 42 percent said they go to traditional healers or herbalists.

The staff's conclusion is that the proximity of the clinic has played a major role in the case of milder illness. That the proportion of those who go to the clinic when seriously ill increases from 15 to 50 percent implies that people have confidence in the mission clinic.

Sixty-seven percent of the households included in the inquiry had used the clinic's services during the past 12 months; 80 percent of them were satisfied with the treatment they had received; 15 percent were not satisfied and 5 percent didn't reply.

Fifteen percent had visited the clinic for reasons other than illness, e.g. for maternal health care or preventive child care.



PHOTO: UNHCR

*A successive story in nutrition rehabilitation.*

Among those asked, 83 percent considered the mission clinic beneficial to them, 10 percent said it didn't benefit them and 7 percent said they didn't know.

What was the clinic's greatest benefit? Their reply was: The availability of medicines (80%), vaccines (47%), help during childbirth (54%). (The reason that the percentage responses add up to more than 100 is that many people gave more than one answer.)

**Health education:** Among those who visited the clinic at least once, 54 percent had heard about weaning food, 31 percent could describe how to make it and 23 percent had prepared it at least once themselves.

Eighty-five percent said they had heard about oral rehydration treatment, 60 percent could



*Nutrition teaching is best learnt by doing.*

PHOTO: LEIF GUSTAVSSON

tell how it is done and 47 percent had done it. Oral rehydration solution is a liquid consisting of 1 litre of water, 4 teaspoons (23 gms) of sugar, a half teaspoon (3-5 gms) of salt and (optional) a quarter teaspoon of bicarbonate. These were encouraging figures reflecting an effective educational programme.

**Child care:** Sixty percent of 0-5-year-olds have Road-to-Health cards, which indicates that they have visited the clinic at least once.

**Maternal care:** Seventeen percent of women in the fertile age-group (15-45) said that they had at least one injection in the left upper arm during pregnancy (tetanus toxoid). This is an indirect measure of how many have been reached by maternal health care, as all such patients are vaccinated on their first visit.

**Delivery care:** Eleven percent of mothers during the previous 10 years had given birth to a child at the clinic at least once. Sixty-three percent said that they usually deliver with the help of a traditional birth attendant, 26 percent that they are assisted by family members. (But as we have seen above, 54 percent appreciated that the clinic was nearby because help during delivery was available.)

From this Bindu understands that the delivery clinic only serves a small section of the population, although it is seen as a "safety net" if something should go wrong.

A closer look at the statistics shows that a larger proportion of those who have had normal deliveries at the clinic have come from a small, privileged part of the population. Deliveries with complications occur among all classes of society. Also, perinatal mortality in complicated deliveries is high at the clinic: 30 percent.

## Conclusions

Bindu and her clinic and mission colleagues are now ready to draw some conclusions from what they have learnt. They look at the clinic's various functions:

**Maternal and delivery care:** Thirty percent of all women in the target area who can be expected to be pregnant during the year under study come to the clinic at least once. Normally, they are among the privileged group of those with some education. The poor and uneducated are not reached through the maternal health clinic.

The same applies to deliveries. Women who have normal deliveries at the clinic almost

all come from the privileged group. Those from other social groups come only when there are complications, often so late that their babies die. (This explains the high mortality rate.)

*If the clinic cannot reach women from the underprivileged part of the population with preventive maternal care and care during childbirth, how might they be reached?*

It is an inescapable fact that almost two thirds (63 percent) of local women have their babies delivered by traditional birth attendants (TBAs). This gives everyone concerned with the clinic pause for thought. An idea begins to develop: Why not cooperate with the TBAs, help to increase their reputation and skills, teach them to recognize, for example, when a foetus is in the breech position, back them up with a referral system? If they could learn more about maternal health care, and perhaps also about family planning, wouldn't this help to cut down the number of deaths?

The idea is discussed and it is decided to seriously investigate the possibilities of cooperation with the TBAs.

**Preventive child care:** Despite so many realizing the value of vaccinations there is still only a 34 percent coverage of 0-5-year-olds. Perhaps vaccination campaigns in the villages should be organized. The team decide to take up the question with the government health inspector, with a view to a possible joint project.

Why does the number of patients increase? One explanation is over-reporting; the reliability of the statistics has already been put in doubt. Another explanation could lie in a combination of increased confidence in

the clinic *and* increased poor health among children.

Many villages are very poor and families lack sources of income and therefore fall more and more heavily into debt. The frequency of undernourished children is very high among these families, according to the field study, and poor child health therefore common. Mothers often come to the clinic with their children to obtain the "power medicine" (vitamin A and D drops) that are believed to have a magical strengthening effect. Vitamin A supplementation is now believed to have great value in lowering childhood mortality and giving protection especially in measles.

#### THE VITAMIN A STORY.

In 1986 UNICEF published a very important finding of research in Indonesia where Vitamin A supplementation (200 000 iu capsule of Vit. A every 6 months) without any other accompanying health measures lowered pre-school childhood mortality by 34% (Dr. Alfred Sommer). This work was repeated in India and an even bigger reduction was seen there (54%). A study in Nepal showed that after 12 months of Vitamin A supplementation (60 000 retinol equivalents every 4 months in pre-school children aged 6-72 months) there was a 30% reduction in mortality. This was independent of the nutritional state of the children. It has also been known for some time that in measles, Vitamin A not only decreases the risk of severe eye damage but also cuts the mortality of these children by half (two studies, one in Tanzania and one in South Africa). This supplementation was especially protective in those children under 2 years and in those where measles was complicated by croup or

laryngotracheobronchitis.

Thus Vitamin A supplementation can improve health, reduce mortality and reduce complications of measles. But as an example of a vertical programme it should also be combined with a vigorous birth spacing programme so that a short-term gain is not followed by a long-term disaster where over-population can threaten the sustainability of the health of the community as well as the ecology of the environment. An outstanding source of Vitamin A obtained naturally is Papaya (paw-paw) and in areas where this can be grown, the fruit should be encouraged, especially since fruit-bearing often continues for up to 6 months each year.

The increase in patients could also partly be due to the sudden increase in population, as 300 families were moved to the area due to a series of serious landslides.

To be able to slow down the increasing number of visits to the clinic, it is necessary to counteract undernourishment and teach about nutrition. Other areas to concentrate on would be diarrhoeal illnesses and teaching about oral rehydration and environmental hygiene. The team also have great expectations for cooperation with the government development project.

In order to reach the underprivileged, it is decided to make home visits and to establish health posts in surrounding villages.

The clinic's capacity should not be increased, the team conclude; instead, its activities should be broadened. They decide to recommend to the mission board that the premises be repaired, as they are in a poor state. They also request increased grants that

will allow them to work in the villages. The justification is that in the long run, the need for the clinic will be reduced and the whole population will benefit from better health resulting from the extended activity.

Bindu and her colleagues now face a lot of planning and will benefit from the experience of this type of work in neighbouring clinics, such as in Maryam's area.

### Preparing for change



In Village C Karin and the staff have continued their evaluation work by interviewing political leaders in the village, according to their prepared list.

When they come to a village, they visit the leaders or elders and talk with them. Having explained that they want to speak with groups of people in the village, the visitors often receive approval to do so, and sometimes even an offer to gather the people for a meeting. In such a way, the visitors have many opportunities of speaking with villagers during the following four weeks.



Early in the mornings, they go down to the water source and talk with the women who gather there. Later they go to the teashop and take part in conversations, putting some or all of the questions from their prepared list. In some villages, they also meet women who take their washing to the stream or the water source. The bus stop is another good spot to find people with time to talk.

The interviewers find it useful to memorize questions from the prepared list and pose them whenever it seems suitable. After a discussion, they write down the answers, as well as the date, place, number of people present and, finally, their general impression

of the meeting. It is not always suitable or possible, of course, to pose all the questions.

When questioned about the major changes that have taken place during the last 10 years the most frequent reply is the installation of electricity, which enables people to take their grain to the mill and have it ground. Some also mention the construction of a bridge, which ended the isolation during the rainy season. Others say that more children now attend school.

Negative changes are reported, too: an increase in starvation and more children dying from illness and undernourishment.

Still many consider that people in general have it better than before.

It appears that the mission clinic has helped in opening people's eyes to the connection between hygiene and health as well as the value of immunization.

Among the things through which the political leaders want to improve living conditions are piped water, increased food production and improved communications.

Most people know about the different activities at the clinic. However due to traditional shyness about discussing use of family planning in front of friends and neighbours few admit to knowledge about this aspect of the work. Information about family planning is probably not spread in the usual way.

In the villages closest to the clinic, the vast majority have at some point used the clinic's services. In those further away, there are fewer who say they have done so. Some say they would use the clinic more if it were closer.

Most acknowledge the value of immunization, although many have not been motivated enough to bring their child- ren to the clinic to be vaccinated. A few complain about complications following vaccination.

There is a generally positive view of the clinic's curative care. Yet complaints about long waiting-times are expressed and some say the staff don't pay proper respect to the traditional ways of perceiving illness and health: "The gods haven't changed just because some new-fangled things have arrived."

Some parts of the nutrition education could not be accepted as certain recommended foods were taboo. Many say, however, that they have derived great use from learning to treat diarrhoea with "medicine water" - that is, oral rehydration mixture. The knowledge that illness can be prevented has spread and is in sharp contrast to the traditional way of seeing illness as a curse of the gods.

Before the team draw any final conclusions from the survey, they want to discuss the material in a larger group. After consultations with the local health inspector, representatives of people living in the target area and staff at the government clinic are invited to a meeting. In addition, representatives of the church will participate.

### Looking at results

When everyone has arrived, about 30 people are gathered in the local school. The health inspector and Karin start the meeting by presenting the following facts:

The government has a newly-opened clinic in the area, which will take over the responsibility for health care. The mission clinic will be closed, and the mission wants to make the transition as smooth as possible. The advantages of a good government clinic are pointed out. Whether or not the clinic becomes a good one will depend, to a large degree on support from the population.

Karin then presents the results of the interviews. It is agreed that increased information in the villages about the immunization programme is needed. Also, it is desirable that the villages furthest away from the clinic be visited once a year, so as to carry out vaccinations. As the government clinic did not have resources for this, the

church would help with labour and the villages would help with volunteers to assist the vaccination team when they arrived.

The undernourished children in the villages and the high frequency of illness are also discussed. Then someone takes up the question of traditional birth attendants. It is generally known that these are antagonistic to the mission clinic because they see it as a threat to their own activities and in some cases to their livelihood.

Karin notes this as an unwanted effect. Would the moment of transition, she wonders, be a good time to try and change this attitude? Could the new clinic invite the traditional healers and birth attendants to a meeting and treat them as collaborators rather than competitors?

The discussion continues with the question of how to counteract diarrhoeal illnesses and improve environmental hygiene. Before the meeting ends, a health committee is formed and it is agreed to hold further meetings for a joint resolution of problems and support of the clinic.

Afterwards everyone seems pleased. In itself, the meeting has not added much to the mission clinic's evaluation but a start has been made on tackling health issues and the health inspector could look forward to popular participation in running and planning activities of the new clinic.

Later, with the staff and the church and mission leaders, Karin finally answers the questions behind the evaluation: Have the aims of the clinic been reached? Has the clinic been a practical demonstration of what the gospel is all about?

All agree that the clinic has influenced the creation of the little congregation that had sprung up. It is also agreed that it has filled a need and that many people have been helped.

The effect on society at large is increased awareness about many illnesses being preventable, something demonstrated at the recent meeting. In addition, a small but growing part of the population has understood and received the gospel, with all that this means in terms of change to all aspects of their life.

Among the non-desirable effects, in addition to antagonism from traditional healers and birth attendants, the staff point to an excessive faith in medicines, especially vitamins and injections. Both these problems could perhaps have been avoided to some degree if the clinic staff had been aware of them earlier.

The lessons learnt are:

- it is not enough merely to offer vaccinations at the clinic if immunization coverage over a wide area is desired. Visits to outlying villages must also be made;
- good relations with traditional health workers in the neighbourhood should be established from the outset and there should be cooperation with them, if possible;
- activities should be built up in line with government policy so that later handing over to the government is simplified;
- the evaluation process in itself had been useful, for people had become involved and a health committee was formed.



## Summary and comments

We have accompanied Maryam, Bindu and Karin as they reflect on and evaluate their work.

**Maryam** used the local health committee in an effective way so as to achieve popular participation in setting aims and in planning. She planned for continuous evaluation from the start and already, after only two months, she used the statistics gathered to identify weaknesses in the daily routine. This enabled her to modify work strategies at an early stage.

During the coming months and years she sees changes in the spectrum of illness, e.g. when the larger part of the population have ready access to clean water, diarrhoeal

illnesses will decline. She also notes that the number of patients seeking treatment for skin diseases, such as scabies, is cut in half.

After the first year Maryam notes that in order to achieve a 60% immunization cover twice yearly instead of once yearly visits to the villages are necessary.

(The coverage is calculated by relating the number of completed vaccinations to the total number of children that Maryam has knowledge about, thanks to the field study. If she had not known, she could have estimated the number of children, using the national figures on age distribution and a figure for the total population in the target area.)

**Bindu** and her colleagues made a relatively simple field study that corresponded with their needs. They learned something about the demography of the area, the nutritional state of 1-5-year-olds, the number of children who have completed a vaccination programme, the number of fertile couples who practise family planning, which illnesses exist, where people turn for help when they are ill and whether they are pleased with the help they get, deaths and causes of death, use of the clinic for deliveries and for instruction in environmental hygiene and the degree to which health education at the clinic has penetrated the area.

Knowledge about field studies at the Village A mission was used and a draft questionnaire sent to Maryam, for comments. Further exchange of experiences with Village A took place when those with field study expertise arrived to help train staff and design an appropriate questionnaire.

Bindu and her team in turn shared their experiences with Maryam's team concerning the day-to-day gathering of statistics and the new forms they developed for this purpose that reduced the risk of errors.

Bindu involved the staff in the evaluation work, which in time caught their interest and motivated them to be meticulous when gathering data.

**Karin** had a tricky task. Her colleagues had previously been against closure of the clinic. The reasons were easy to understand. They were proud of the clinic that they participated in building up over the years and they felt as if in competition with the government clinic that had opened. The decision to close down the mission clinic had been taken "over their heads" and they could easily feel they were losers.

Karin gave them an opportunity to react and to express their worries (and perhaps anger). She helped them to see the matter from the point of view of the population through participation in the evaluation process. It was vital that they were offered the chance of equivalent employment at the new clinic.

In the case of Village C, it might have been useful to have had outside help with the evaluation, so as to make it a little more professional. On the other hand, the purpose here was to make the transition as smooth as possible and to ensure a good start for the government clinic.