

IMMUNIZATION IN PRACTICE

A Guide for Health Workers who give Vaccines



7

HOW TO EVALUATE YOUR IMMUNIZATION PROGRAMME

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- Module 1 - Vaccines and how to look after them.
- Module 2 - Syringes, needles and sterilization.
- Module 3 - When and how to give vaccines.
- Module 4 - Preparing for an immunization session.
- Module 5 - How to conduct an outreach immunization session.
- Module 6 - Health education in an immunization programme.
- Module 7 - How to evaluate your immunization programme.
- Module 8 - Preventing neonatal tetanus.

TRAINER' GUIDE

This set of 8 texts, or modules, together with the Trainer's Guide make up a training manual for health workers who will give vaccines.

The texts explain what vaccinators need to know about immunization, and they describe and illustrate what vaccinators must be able to do.

A "controlled" or simplified style of English is used so that more trainees can read the material, even though this is not their first language, and so that the text is easier to adapt and to translate into other languages.

However, health workers can not learn all that they need from a book, or from lectures. They need practical exercises as well. So, in addition to factual text, a number of suitable exercises and other training ideas are included. The Trainer's Guide includes suggestions for practical exercises, as well as answers and comments for the questions and exercises in each module.

7. HOW TO EVALUATE YOUR IMMUNIZATION PROGRAMME

Why evaluation is important

The immunization monitor chart

Deciding how successful is your programme

7.1 Evaluation

Why should you evaluate your work?

Everybody who works in an immunization programme needs to evaluate or monitor their work.

Evaluation is not only for the supervisors and programme managers. It is also important for the PERSON WHO GIVES THE VACCINES.

The purpose of evaluation is to know:

- how successful your work is
- what you need to do to improve your programme
- what help you need from your supervisor

If you know how well you are doing, you will find your work more satisfying. Then you will enjoy your work more, and you will work better.

How much time does evaluation take?

You need to spend about 15 minutes once a week and an hour once a month.

7.2 Weekly evaluation

- Did you hold all the immunization sessions that you planned?
- Did you have enough vaccines?
- Did you check the refrigerator every day and record the temperature?
- Were all the refrigerator temperatures in the safe range? (0°C to +8°C)
- Did you check the immunization status of all women of child-bearing age and of all children, sick or well, who came to the clinic?
- Did you then give the women and children all the vaccines that they needed?
- Did you inform them about the other immunizations that they will need and tell them when to come back?
- Did you have enough syringes and other equipment to give safe, sterile injections?

IF THERE ARE NO MAJOR PROBLEMS

Probably your immunization programme is working effectively

IF THERE ARE PROBLEMS

Find the cause and try to correct it

- Sessions not held
- Not enough vaccines
- Refrigerator too warm
- Not enough syringes

7.3 Monthly evaluation

- What percentage of the monthly target children received each vaccine month? - For example DPT 1?

$$\frac{\text{Number who received DPT 1}}{\text{Target for the month}} \times 100 = \% \text{ immunized with DPT 1}$$

- What percentage of children who receive DPT 1 did not receive DPT 3 vaccine (drop out rate)?

$$\frac{\text{Number who received DPT 1} - \text{Number who received DPT 3}}{\text{Number who received DPT 1}} \times 100 = \text{Drop out rate}$$

- Are children who are sick from the target diseases coming to the clinic?

Keep a record of the children who come to your clinic with measles or pertussis. Count up the total every month and make a simple chart.
 (See Fig. 7-1)

Compare each month with the same month the previous year. See if the number of cases decreases year by year.

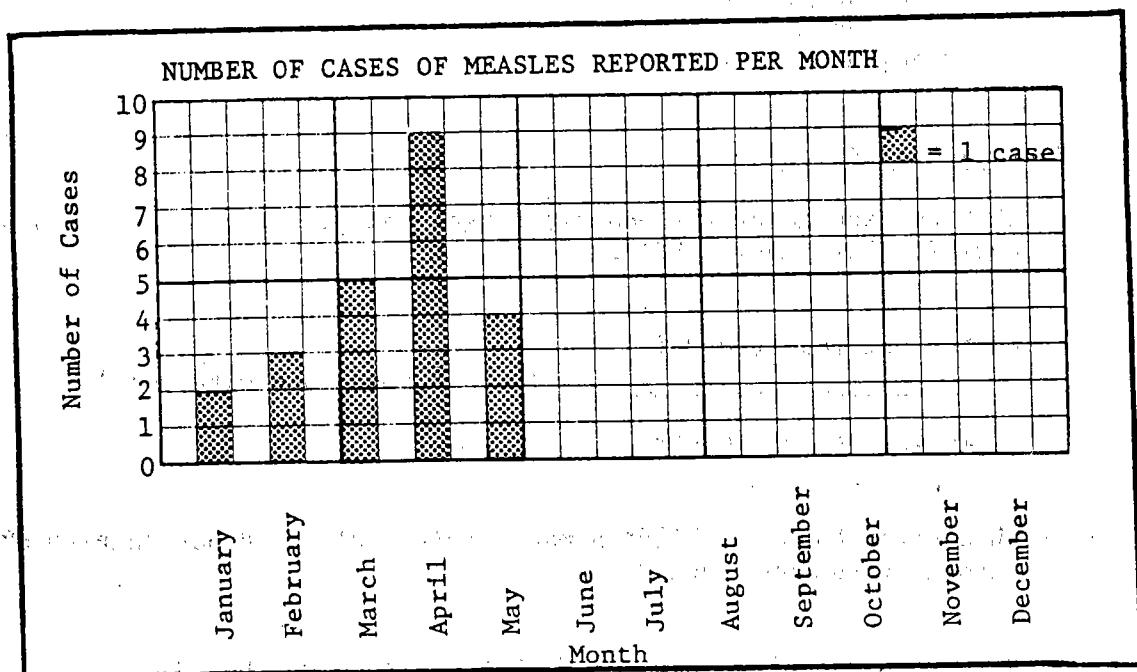


Fig.7-1 Chart showing number of measles cases reported per month

Ask WHY each child with one of the target diseases was not immunized.

- Did the mother not bring the child for immunization?
- Was the child not immunized because it was sick?
- Did the child have the vaccine but it did not work? Why?

Decide what action to take in each case.

How to find your monthly target population

To do your monthly evaluation you must know your monthly target population. You may need the help of your supervisor to find this out, but it is your responsibility to make sure that you know it.

1. Find the TOTAL POPULATION of the areas served by the health centre or outreach site.
2. Work out the NUMBER OF BIRTHS PER YEAR. To do this, work out 3% of the total population.

POPULATION x 3/100 = number of target children for 1 year.

Example:

The population of your area is 10 000

The number of births per year is 10 000 x 3/100 = 300

So the number of new target children per year, that is the yearly target, is 300.

3. To find the monthly target population, divide the yearly target by 12.

$$\begin{array}{rcccl} 300 & / & 12 & = & 25 \\ \text{(yearly target)} & & & & \text{(monthly target)} \end{array}$$

7.4 How to monitor your immunization coverage

Monthly method

This is based on the calculation shown in 7.3.

Work out what percentage of the monthly target population of children and mothers you immunize with each vaccine, every month.

When you look at these figures for several months together, you can see approximately what percentage of children you are immunizing, whether it is a large or small percentage, and if the number is increasing or decreasing.

Cumulative total method

You can use a special monitor chart which shows the same information in more detail.

In some ways the monitor chart is like a child's growth chart. It shows you how the number of immunized children in your area is growing.

You need help from your supervisor to start the chart, but then you can fill it in and read it for yourself.

7.5 The immunization monitor chart

Understanding the chart

Study the chart in Fig 7-2.

There are twelve squares going across the chart, and twelve squares going up and down.

There are twelve squares going across because there are twelve months in a year.

Find the numbers up the right side of the squares. These are for the % of the yearly target population. This is the percent scale.

Find the % target lines - for 100%, 75%, 50% and 25% of the target. The beginning of the year is on the left, and all the lines are at 0, as you are starting your monitoring at the beginning of the year. The lines rise as they go across the chart, showing the growing number of children who should be immunized as the year passes.

Monitoring of
Immunization
Coverage

Year 1984
Vaccine DPT 1, 2, 3,

Health Centre: Valla.
Target Pop: 2400

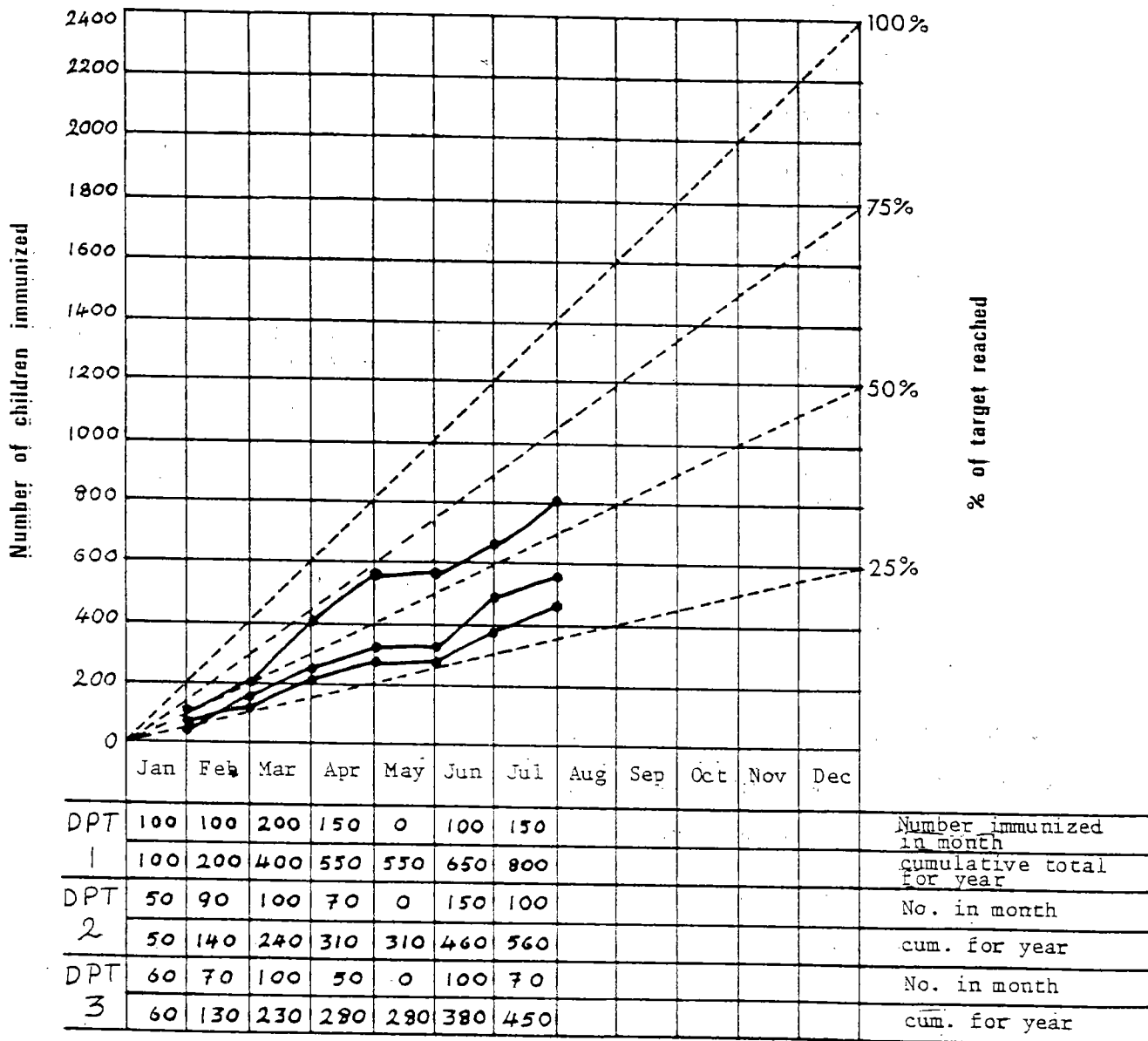


Fig.7-2. Immunization Monitor Chart.

Preparing the chart for your population

1. Fill in the target number scale using your own target numbers.

First calculate your yearly and monthly target population.

Then use those target numbers to make the target number scale on the left side of the chart. This is how you do it:

- Put 0 in the bottom space
- Move up one space and write the number for one month's target
- Move up another space and put the number for two month's target
- Move up one more space and write the number for three month's target
- Continue to move up one space at a time, each time add to the previous the previous monthly target number
- When you reach the top space, you fill in the target number for twelve months - that is the yearly target number
- You can see the yearly target is opposite 100%.

The chart in Fig.7-2 is filled in for a yearly target of 2 400 children at a place called Valla.

2. Write the months of the year from January to December

These go along the bottom of the chart

Filling in the chart

You can use the chart to monitor one or several vaccines.

Make a separate line on the chart for each vaccine.

Fig.7-2 is filled in for all three doses of DPT.

Below the chart you can see some rows of spaces. Here you write the number of doses that you give of each vaccine.

You need two rows of spaces for each vaccine.

"Number (No) in the month"

In the top row of spaces for each vaccine, write the number of doses that you give in each month separately.

You can see that at Valla, they gave 150 doses of DPT 1 in July.

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Exercise - Reading a monitor chart

Study the chart for Valla in Fig.7-2 and answer these questions.

1. What is the monthly target population for Valla?
2. How many children should have had DPT 1 between January 1 and July 31?
3. How many children DID have DPT 1 between January 1 and July 31?
4. What % of the target population for the first seven months of the year had DPT 1 by the end of July?
5. Answer the same questions for DPT 2 and DPT 3.
6. Answer the same questions for the period January 1 to April 30.

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7.6 How successful is your programme?

If your monitor line is between the 75% and the 100% target lines:

Your programme is VERY SUCCESSFUL. Few programmes are this successful

If your monitor line is between the 50% and the 75% target lines:

Your programme is MODERATELY SUCCESSFUL.

If your monitor line is between the 25% and the 50% target lines:

Your programme is not very successful.

If your monitor line is below the 25% target line:

Your programme is not successful at all.

What do you do if you find out that you are reaching less than 50% of your target?

You must try to find out why.

1. Ask yourself these questions

- Are you doing what you promised you would do? (are you reliable and punctual)
- Are your sessions easy and pleasant to attend?
(In some places the market day is a good day. In other places market day is a bad day. In some places the early morning is a good time. In other places the afternoon is better)

2. Ask other workers in the clinic

- Do they know of any reason why the people do not come?
- Don't forget to ask cleaners - people might say things to them that they would not say to you.

3. Ask the people

- Ask the people who do come to the clinic. Ask why they come. That might give you an idea about why mothers do not come.
- Ask if they know why mothers do not come.
- Ask ordinary people in the village or market.

4. Ask the community leaders

- Do they know of any problem that the people have with your immunization programme?
- You may have noticed that nobody from a certain area or village comes to your session. Talk to the community leaders to find out if there is a special reason for this.

5. Discuss the problem with your supervisor

6. Decide what you can do about it

CASE STUDY - Mr. Kabu and the Tetanus Toxoid

Mr. Kabu, the Community Nurse, knew that many babies in this area died of neonatal tetanus. He felt very bad when he could not cure the babies, and he was very pleased to hear about tetanus toxoid. He worked very hard to persuade the woman at the antenatal clinic to have the vaccine. He immunized about 15 women each month, which was 75% of the target.

One day two women refused tetanus toxoid. Then nobody came for the antenatal clinic for three weeks. Women only came when they were already in labour. Mr. Kabu was very worried, but he did not know what to do. He told the mothers with babies to talk to the pregnant women.

"They must have the injection to protect the baby when it is born", he said.

The mothers looked embarrassed and said nothing. Next week, only two mothers with babies came for the other vaccines.

Then the supervisor, Mrs. Mena visited. She noticed how empty the immunization clinic was, and she asked what the problem was. She knew that Mr. Kabu was a good, careful worker. He could not tell her.

A few weeks later Mrs. Mena came again. She called at the market for some beans on her way, and she talked to Mrs. Joki that she had known for a long time.

"You remember Mrs. Ella? She had a miscarriage the day after she had the new injection. Now, all the women are afraid of the vaccine" said Mrs. Joki.

"Oh dear. That is very sad. Thank you for telling me. We must try to put this right."

She went to the clinic, told Mr. Kabu, and they discussed what to do.

Points to discuss

- a) What was Mr. Kabu's mistake?
- b) What should you do if suddenly people stopped coming to your immunization session?

7.7 Conclusion

Always try to evaluate your work, and increase your immunization coverage.

If your programme is not successful, discuss it with the people in the community. Find out why and try to do better.

If your programme is successful, tell people about that too.

Thank and congratulate all the people who help you -

Thank the other health workers

Thank the community leaders

Thank your contact people

...and thank the women and children that you have immunized.