



Participatory Epidemiology

A Guide for Trainers

Chapter 3

General Principles of Participatory Epidemiology

Contents

Session: Community Participation	23
Session: Introduction to Participatory Epidemiology	27
Session: Attitudes and Behaviour for Participatory Epidemiology	30
Session: Managing Ourselves and Others	35

Catley, A. (2005). Participatory Epidemiology: A Guide for Trainers. African Union/Interafrican Bureau for Animal Resources, Nairobi.

ISBN 9966-7044-0-X (paperback)

ISBN 9966-7044-1-8 (electronic)

All rights reserved. Reproduction and dissemination of this publication for educational or other non-commercial purposes are authorized without prior written permission from the copyright holder provided the source is fully acknowledged. Reproduction of material in this publication for commercial purposes is prohibited without written permission from the copyright holder.

© African Union/Interafrican Bureau for Animal Resources, 2005

African Union/Interafrican Bureau for Animal Resources

PO Box 30786

00100 Nairobi

Kenya

Chapter 3 General Principles of Participatory Epidemiology

This chapter presents ideas for introducing the basic principles of PE. The chapter is arranged as a series of training sessions which begin with the session objectives and an outline lesson plan.

Session: Community Participation

<p>Session objectives:</p> <p>At the end of the training session, trainees should be able to:</p> <ol style="list-style-type: none"> 1. Describe the origins of community participation as a development approach 2. Explain different types of community participation 	<p>Outline session plan:</p> <ul style="list-style-type: none"> ○ Reviewing participants' experiences of participation and constraints → group work (~ 60 minutes) ○ Why is participation important? → whole group session (~ 80 minutes) ○ Different types of participation → presentation and discussion (~ 40 minutes) <p>🕒 Total time required: ~ 3 hours</p>
---	--

**Reviewing
past
experience**

The term 'community participation' means different things to different people. During a PE training course, discussion on community participation can be developed by asking trainees to think about their past experience when trying to encourage participation, and the problems they faced.

In the Arusha PE Training the trainer divided participants into groups by country and asked each group to consider two key questions.

Key question How have you promoted the participation of local people in your work?

Key question What are the main constraints that you have faced when trying to use participation?

The trainer summarized the group responses on a flip chart, as shown overleaf.

Participatory Epidemiology: A Guide for Trainers

How have you promoted participation in your work?

Activity	Number of groups citing activity (total 7 groups)
Disease surveillance using interview/questionnaires	4
Community dialogue or village meetings	4
Sensitization/working with local administrations	4
Vaccination campaigns	3
Implementing CAHWS projects	3
Sero-surveillance	2
Providing disease information to farmers	2
Developing communication materials	2

What are the main constraints that you've faced when using participation?

Constraints	Number of groups citing constraint (total 7 groups)
Lack of skills or sufficient staff trained in PE	5
Socio-cultural barriers	3
Language barriers	3
Lack of support from superiors/approach not accepted by them	3
Poor access to communities due to bad roads	3
Insecurity	2
Drought	2
Community has other priorities	2
Conflicting interests or manipulation	2

The trainer then used these responses as the basis for a group discussion and to probe understanding of community participation among the trainees. Such discussion can be prompted by asking the group to consider questions such as:

 How do communities participate in disease surveillance if you are using a questionnaire?

When using participation, what are the specific skills which you think you lack?

 Key question

Participatory Epidemiology: A Guide for Trainers

Why is participation important?

Trainers can expand discussion on community participation by encouraging participants to reflect on why participation is important.

Examples of 'failed' projects due to poor participation can be provided and participants can be asked to offer their own examples. In the Arusha PE Training a livestock project in Papua New Guinea called the '100 to 1 Cow Project' was used as an example of a project that failed to meet its objectives. Participants were given a brief handout about this project and asked to read it (see Handout 1, Annex 1). They were then asked to describe projects that failed due to poor participation. Some of their experiences are presented below.

Why is participation important?

'I know of a project that tried to improve wells. The new wells meant that people no longer had to work together to draw the water and could collect water individually, any time they liked. But, people still preferred the old wells – they liked the fact that water collection was partly a social activity and this was lost with the new wells'.

'I was studying in the US and saw old library books being thrown away. I thought the books could be used in my own community back home in Uganda, and I tried to set up a library there. But for the people, a library wasn't a priority – they wanted a clinic not books.'

'I know about a project around Dar es Salaam that was donating animals to people living near the city. But these people had no knowledge of livestock rearing and the project failed'.

'I remember visiting sites where new housing had been constructed for returnees coming back to my country from Sudan. The area was a hot, lowland place and the new houses were designed with no ventilation and low, iron sheet roofs. Of course, the returnees families refused to live in the new houses and they remained empty'.

The trainer then asked participants to review the discussion so far and summarise the main the reasons why participation is important. The reasons were listed on a flipchart as follows:

- To avoid failure of projects/activities
- To improve effectiveness of our works and inputs

Participatory Epidemiology: A Guide for Trainers

- To ensure local commitment
- To enhance local ownership
- To recognise cultural sensitivity
- To improve sustainability
- To ensure that outsiders do not misunderstand needs
- To avoid duplication of activities
- To avoid wastage of resources

These experiences show how participants are usually very aware of the rationale for encouraging participation in development. By using Handout 2 (Annex 1), the trainer can then give a brief 10-minute presentation on the different approaches that influenced the emergence of community participation. But are there different kinds of participation and if so, how can participation vary in different projects?

Types of community participation

The trainer can use the typology of participation (see Handout 3, Annex 1) to prepare a short presentation on different types or levels of participation. This presentation need last no more than 10 minutes and can build on, and refer to experiences cited by trainees in the previous sessions. Participants can then be asked to suggest examples to illustrate these different types of participation from their own work or knowledge of other projects or sectors.

A key point for the trainer to highlight is that the type of participation in a particular project has a strong influence on the sustainability of the project - the greater the involvement of local people and contribution of resources, the better the sustainability.



Participatory Epidemiology: A Guide for Trainers

Session: Introduction to Participatory Epidemiology

<p>Session objectives:</p> <p>At the end of the training session, trainees should be able to:</p> <ol style="list-style-type: none"> 1. Describe the basic concept of PE 2. Explain the main differences between qualitative and quantitative methods 3. Describe the three main groups of methods used in PE 4. Explain the concept of triangulation 	<p>Outline session plan:</p> <ul style="list-style-type: none"> ○ What is PE? ➔ brainstorming session (~ 20 minutes) ○ Experiences with qualitative and quantitative methods ➔ whole group session (~ 30 minutes) ○ The three groups of PE methods ➔ presentation (~ 20 minutes) ○ Triangulation ➔ brainstorming and discussion (~ 20 minutes) <p>⌚ Total time required: ~ 90 minutes</p>
---	---

What is participatory epidemiology?

In the Arusha PE Training, an initial brainstorming session was used to gauge participants' understanding of the term 'participatory epidemiology'. The facilitator wrote the following question on a flip chart and invited participants to offer their ideas.

Key question:
What do you understand by the term
'participatory epidemiology?'

Responses from participants

- 'A way of sharing information on health and disease in the context of a given environment'
- 'Epidemiological studies using participatory tools, which is more qualitative'
- 'Involvement of everybody in epidemiology and making use of local and expert knowledge'
- 'Doing epidemiological studies using professionals as facilitators or participation of farms at different stages of the study'
- 'An approach that involves stakeholders in identifying problems, collection, analysis of data and taking action based on information'
- 'Analyzing disease information using PRA methods and incorporating indigenous knowledge'
- 'Method of understanding the situation in a locality from the community themselves'
- 'Using participatory methods to gather disease situation from the community'

Participatory Epidemiology: A Guide for Trainers

This listing of responses can be followed by a brief explanation from the trainer. A handout can be used to provide further information (e.g. Handout 5, Annex 1).

This exercise was followed by group work. Each group was asked:

 Key question What qualitative and quantitative methods have we used in our work?

 Key question What are the strengths of these different methods?

Some of the opinions of the groups are summarized below:

Interviews

Get explanation on spot.
Can cross check information.
Local expertise used.

Questionnaires

For specific information

Meetings

Wide scope of information is obtained

Literature review

Secondary data obtained

Research

Quality information obtained

Surveys

Get quantifiable data

Reporting

Continuous source of data

Networks

Share/exchange vast information
faster

Conference/seminar

Exchange varied information

Transect walk

Reliable information

The trainer can use this session to lead into a presentation to give an overview of the three main groups of PE methods viz. interviewing methods, visualization methods and ranking or scoring methods. Handout 7 (Annex 1) can be used here.

At this stage of the training, specific methodological details should be avoided – these will be covered later on in the training.

Participatory Epidemiology: A Guide for Trainers

Triangulation

The concept of triangulation can be introduced using a brainstorming session using the question.

Key question

What is triangulation?

If necessary, the trainer can then provide a definition of triangulation such as:

'In PE triangulation is the process of cross checking information using different methods and sources.'

Handout 7 (Annex 1) includes a visual representation of triangulation. A trainer can highlight the point that in PE, triangulation need not be confined to comparison of information from PE methods. It can also include use of information from the literature or conventional veterinary methods, such as clinical examinations and laboratory tests.

To ensure that participants have understood this concept, the trainer can ask people to offer examples of triangulation as follows:

Key question

Suggest example from everyday life where you use triangulation

Key question

Suggest one common veterinary use of triangulation

In the Arusha PE Training, the following examples were offered by the trainees:

Examples of triangulation from everyday life

'Before buying an important item, I check the price in different shops'

'I compare the news on the radio with the news in a newspaper'

'When my children break something in the house I have to be a detective to find out who was responsible. I ask different people to try to get the culprit'

Participatory Epidemiology: A Guide for Trainers

Example of triangulation in veterinary medicine

'During diagnosis you triangulate because you use different methods, such as clinical examination and interviewing'

Session: Attitudes and Behaviour for Participatory Epidemiology

<p>Session objectives:</p> <p>At the end of the training session, trainees should be able to:</p> <ol style="list-style-type: none"> 1. Explain the role of indigenous knowledge as the basis for PE 2. Demonstrate different types of non verbal communication and understand their importance in PE 	<p>Outline session plan:</p> <ul style="list-style-type: none"> o What is our attitude towards indigenous veterinary knowledge? → group work (~ 45 minutes) o PE and non verbal communication → presentation (~ 5 minutes) o Types of non verbal communication → plays (~ 60 minutes) and photographs (~20 minutes) <p>🕒 Total time required: ~ 130 minutes</p>
---	--

This is a crucial part of the training and should not be rushed or overlooked. Trainers can refer to Handout 6 (Annex 1) and prepare a 5 minute presentation on attitudes and behaviour.

Attitudes on indigenous veterinary knowledge

An important aspect of participatory approaches is the way we interact with other people. This interaction determines the relationship and trust that develops between researchers and local people, and affects the types of issues and information that people are willing to discuss in an open manner.

If we look at this issue from an epidemiological perspective, the relationship between researchers and livestock keepers is a key factor affecting the reliability and validity of data. If informants are concerned that researchers have a 'hidden agenda', will use the information solely for selfish purposes or may pass information to authorities, then their participation will be poor. Also, if informants consider outsiders to be rude or arrogant, or only interested in their own opinions, the discussion will not be very constructive.

Therefore, a crucial feature of participatory epidemiology is that outsiders must be constantly aware of their own attitudes and behaviour.

Participatory Epidemiology: A Guide for Trainers

From the perspective of meaningful interaction, researchers must believe that an informant has something useful to say. This means respecting local views and opinions, and being open to ideas that may not necessarily agree with modern science. This does not mean that as veterinarians, we must automatically accept all indigenous knowledge as valid and useful. The idea is to identify local knowledge and skills that seem to agree with our professional know-how, and explore this local knowledge.

A participative training method for raising awareness of the participants' personal attitudes towards indigenous knowledge is to use an exercise called 'Traditional beliefs and practices'.

Box 3.1

How to run a discussion session on Traditional Beliefs and Practices

Divide the group into smaller groups comprising three to five people. Ask each group to think about their home areas and communities. In these communities, ask them to describe traditional beliefs or practices that fit into the following categories:

Traditional practices or beliefs that,

1. Are popular but cannot be explained scientifically. Local people insist that these beliefs or practices are valid.
2. Are popular and agree with scientific knowledge.
3. Are used and may even be popular, but according to western science, would be harmful.

Give the groups about 15 minutes to think of their examples and to list them on flipchart paper. Then, ask each group to present their examples to the others.

Typically, this exercise highlights examples of traditional knowledge that fit modern veterinary thinking. It follows that popular but non-validated knowledge should not always be rejected, as such knowledge might be validated in future. There are many examples of hypotheses about animal diseases arising from observations made by livestock keepers. The trainer can present some of these examples to participants and prompt further discussion regarding the dangers of overlooking local knowledge.

Participatory Epidemiology: A Guide for Trainers

Examples of indigenous veterinary knowledge validated by veterinarians

- Maasai knowledge on links between malignant catarrhal fever and wildebeest
- Dinka diagnosis of CBPP
- Somali diagnosis of CCPP
- Somali diagnosis of surra in camels
- Maasai diagnosis of rinderpest
- Orma diagnosis of bovine trypanosomiasis

Non verbal communication

Two simple methods for training non verbal communication are plays and pictures. These methods can be run consecutively.

Box 3.2 **Using plays to show non verbal communication**

In the Arusha PE Training the 24 participants were divided into four equal groups. Each group was asked to move away from the other groups, and was then visited in turn by the trainer.

The trainer asked the first group to think of three ways to demonstrate submissive behaviour *without talking to each other*. It was explained that they would be required to act out three types of submissive behaviour to the other groups, who would then have to guess what kind of behaviour was being shown.

A similar task was given to the other three groups, who had to demonstrate three ways of showing boredom, arrogance and friendliness. In all cases, the groups were not allowed to speak during the demonstration.

Following these plays, other issues related to non verbal and verbal communication were discussed with facilitation by the trainer. These issues included:

Gender and culture

How is it best to approach women? How can we include women in cultures where it is difficult for outsiders to talk to women? If women are often busy, when is the best time to talk to them?

Seating arrangements

How can we avoid being seated as though we are officials, behind desks or at a level higher than everyone else? How can we understand local customs or arrangements for seating? How can we rearrange seating to avoid causing offence but also improve communication within the group?

Participatory Epidemiology: A Guide for Trainers



A play showing submission



*Even the way we walk gives off messages.
This is an 'arrogant walk'.*



Rejection or boredom?



A friendly group

How to handle food and drink

Should we always share our own food and water with people in the village? How do we handle offers of food or drink if we don't like what they offer us? If you go to some communities, you must drink milk with them if you want to be accepted

The importance of eye contact in communication

Make eye contact except when talking across gender. When talking to the whole group, engage the whole group rather than individuals. Sometimes eye contact is interpreted as a challenge. In different cultures, eye contact means different things

The way we dress

Be aware that we can dress too formally and this intimidates. Middle ground is best – not too scruffy and not too formal. Also, be aware of obvious demonstrations of wealth, such as gold jewellery, expensive fabrics and watches.

Participatory Epidemiology: A Guide for Trainers

Box 3.3

Using photographs and sketches to show non verbal communication

The trainees' understanding of non verbal communication can be reinforced by a discussion session with the whole group using photographs or sketches. The trainer simply distributes each photograph in turn and asks people to call out anything they see in photos related to good and bad aspects of communication. The photographs can show different types of interviewing, seating arrangements or interactions between people. This exercise requires the trainees to look very closely at the pictures and think about how communication can vary.

What do you see? Examples of photographs used in the Arusha PE Training are copied below.



Participatory Epidemiology: A Guide for Trainers

Session: Managing Ourselves and Others

<p>Session objectives:</p> <p>At the end of the training session, trainees should be able to:</p> <ol style="list-style-type: none"> 1. Explain the importance of team management and co-ordination when using PE 2. Describe how to manage informant groups when using PE 	<p>Outline session plan:</p> <ul style="list-style-type: none"> o How do we work as a team? ➔ Rope square game (~ 30 minutes) o Managing groups: giving clear instructions ➔ Folding paper game (~ 10 minutes) o Managing groups: dominant talkers ➔ plays (~ 60 minutes) and photographs (~20 minutes) <p>⌚ Total time required: ~ 130 minutes</p>
--	--

How do we work as a team?

An energizer such as the rope square game can be used to introduce this session.

Box 3.4

The rope square game

The trainer uses a rope, about 2m in length and tied once to form a loop. The rope is placed on the floor.

The trainer then asks for 5 volunteers and tells them to stand in a circle around the rope. The trainer then gives the volunteers the following instructions:

1. Close your eyes and do not open them during the game.
2. Bend down and touch the rope.
3. As a group, make a square.
4. Only open your eyes when as a group, you're confident that you've made a square.

During the game, the other trainees are asked to observe what happens during the game.

The rope square game was used during the Arusha PE Training and the following behaviour was noted:

- Initially, the 5 group members did not speak to each other. They either forgot to speak or wrongly assumed that they were not allowed to speak.
- When they did start talking to each other, their task became easier. However, everyone was talking at once and there was confusion.
- Eventually, one person took the lead and the other group members followed this person's instructions. From then on, the group was better organized and was able to complete the task.

Participatory Epidemiology: A Guide for Trainers

The game illustrated the importance of group organization and leadership when working as a team. Each person in a team must have assigned roles and during the exercise, adhere to these roles. If a team is poorly organized and confused, onlookers will observe these weaknesses and lose confidence in the team.

The trainer can refer to Handout 8 (Annex 1) which suggests some specific roles for different team members.

Managing groups

Many PE methods are used with groups of informants. Therefore, PE practitioners need to be skilled at organizing group work and managing groups. They also need to explain clearly what they want people to do when using methods such as matrix scoring, mapping and other methods.

Box 3.5

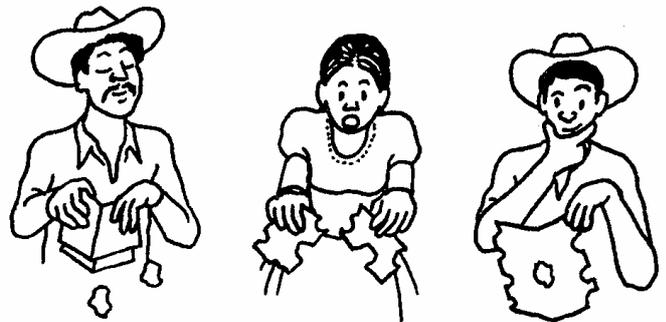
The importance of clear instructions: the folding paper game

Select 4 volunteers and ask them to stand facing the rest of the group. Give each volunteer a blank, square piece of paper around 20cm square and then provide the following instructions:

1. Close your eyes.
2. You may not ask questions.
3. Fold the paper in half and tear off the bottom right corner.
4. Fold the paper in half again and tear off the top right hand corner
5. Fold the paper in half again and tear off the bottom left corner.
6. Open your eyes, unfold the paper and show it the rest of the group.

Usually, the pieces of torn paper are completely different shapes.

This game shows that although verbal instructions may appear simple and the same instructions can be given to different people, they can be misinterpreted. It follows that guidance on how to conduct a particular PE exercise needs to be very clear and practiced beforehand to check that instructions are easy to understand. This 'testing' the instructions is even more important when using a translator.



Participatory Epidemiology: A Guide for Trainers

Dealing with dominant talkers

One of the most common challenges during group sessions is the handling of 'dominant talkers'. Dominant talkers include people who simply talk frequently or loudly, and remain insensitive to whether their views are relevant or interesting to others.

Dominant talkers can also be local leaders or professionals who feel that their views are the only opinions that matter.

Sometimes, dominant talkers can be useful informants. If they are leaders, their knowledge can be very useful. However, when these people prevent others from participating in a group discussion or exercise, they need to be managed in order to allow wider participation.



To raise understanding of dominant talkers, the trainer can prepare a short introduction based on the notes above. The trainer can then run a brainstorming session and ask participants to call out ways to handle a dominant talker.

Experiences from the Arusha PE training

The participants in the Arusha PE Training suggested the following ways to handle a dominant talker:

- Divide the group into smaller groups and disperse the groups to different places.
- Direct questions at particular individuals. If the dominant talker interrupts, say something like *'Thanks for your useful contribution. We can now hear what other people have to say'*.
- Assign a physical task to the dominant talker to distract them.
- During a discussion on animal health, say to the dominant talker, *What you've told us is very interesting. It would be good to see some of your animals and talk more about the problems you've mentioned'*. One of the

Participatory Epidemiology: A Guide for Trainers

team then goes with the person to visit their animals, thereby separating the person from group without causing offence.

- Stop the discussion and resume later.
- Make the dominant talker part of the team.