

## **CHAPTER II**

### **Participatory Action Research as a tool to combat fatal delays in presenting children with pneumonia to a trained health worker**

#### **2.1 Introduction**

The issue of this essay is that caretakers of children aged less than five often present their children with pneumonia too late to a trained health worker, because of a lack of knowledge about its danger signs and constraints in their social environment. Such delays are an aggravating factor for pneumonia-related mortality in children less than five and should therefore be prevented. To combat these delays I propose to use Participatory Action Research (PAR) as a methodology to train caretakers to recognize the danger signs of pneumonia, and to find solutions to overcome social obstacles that prevent them to present their sick children on time to a trained health worker.

I advocate this solution for the following reasons:

- Some factors that cause ARI, and more specifically pneumonia, such as poor hygiene or incorrect breastfeeding practices, are located in the immediate environment of the communities and can be acted upon by them.
- Some factors that prevent correct treatment, such as lack of knowledge or lack of transport to health facilities, are located in the immediate environment of the communities and can be acted upon by them.

- Caretakers can identify and act upon these factors by learning about causes that lead to ARI, and more specifically pneumonia, and solving the problems that put obstacles in the way to correct health care seeking.

### 2.1.1 Justification

WHO (1992) describes acute respiratory infections (ARI) as infections in any area of the respiratory tract (nose, ears, throat, voice box, windpipe, air passages, or lungs). While most children have between four to six ARI per year, only a small portion of them is life threatening. These are mainly the infections that were not cured (either spontaneously or by treatment) and develop into cases of pneumonia, an acute infection of the lungs. Most fatal, though treatable, cases of pneumonia in children are caused by two bacteria: *Streptococcus pneumoniae* and *Haemophilus influenzae* (International Conference on ARI, 1997).

Many factors that favour ARI, and more in particular pneumonia, are located in the caretakers' direct environment, such as indoor air pollution, indoor climate, housing quality, availability and quality of food (UNICEF, 1993; WHO, 1997). These factors often are themselves influenced by socio-economic factors, such as access to material resources and knowledge. Poverty is a main determinant of ARI (WHO, 1997). No surprise, then, that the bulk of all cases of pneumonia in children under five occur in the developing world. With 3 million deaths due to pneumonia per annum (International Conference on ARI, 1997), and with a share of about one fourth of all children's deaths, pneumonia is the single biggest killer of children under five in the developing world (WHO, 1992; WHO, 1997). The extent of pneumonia-related mortality, and the realization that many deaths could have been prevented (International Conference on ARI, 1997), with considerably

mortality, and the realization that many deaths could have been prevented (International Conference on ARI, 1997), with considerably less overall deaths in children (WHO, 1992), not only justify a focus on a strategy to reduce pneumonia-related mortality, but also make it urgent.

The WHO recommends immunizations and case management as short term strategies to reduce pneumonia-related mortality (WHO, 1997). However, immunizations against *Haemophilus influenzae*<sup>1</sup>, while being successfully used against diseases caused by this organism in developed countries, have hardly made their entry in the developing world, mainly because of their high cost (International Conference on ARI, 1997). Unless the price of this vaccine can be reduced, case management will remain the main strategy to reduce pneumonia-related mortality in the short term.

In this essay I will focus on case management, not only for the above-mentioned reason, but also because it allows to exploit communities' often neglected potential in increasing the efficacy of the health services. In addition to this, I expect a spin-off of this strategy through the communities' increased involvement in preventive measures that reduce the chances of their children being affected by pneumonia. Therefore, I will narrow down my focus on communities, and more specifically on caretakers of children under five years of age.

The case management of pneumonia strategy contains two components. First, the training of health workers to recognize the simplest signs of pneumonia, such as a

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<sup>1</sup>Vaccines against *Streptococcus pneumoniae* are still under development

fast breathing rate, and to treat cases properly with oral antibiotics (WHO, 1997).  
Second, the enhancement of families' abilities to seek assistance from trained health workers, who provide appropriate care to a child with pneumonia (Hudelson et al., 1995).

Pneumonia in children under five years old can be detected by specific danger signs, such as convulsions, inability to drink, abnormal sleepiness, etc. A detailed overview of these danger signs is given in Appendix 2.1. Amongst these danger signs, fast breathing takes a prominent place. Some authors state that it is the single best sign that a child has pneumonia (Malik Kundi et al., 1996). A child that shows fast breathing suffers of moderate pneumonia.

The condition of a child showing fast breathing can decline quickly, with death occurring within a few days. Therefore, caretakers should learn to recognize fast breathing in their child (Iyun & Tomson, 1996), and when they observe it, seek prompt treatment from a trained health worker. This implies that they have the means to request immediate assistance from a trained health worker. Success of the case management strategy depends in the first place on the caretakers' behaviour, before they contact the health services (McNee et al., 1995). But this is also its weakness.

Many obstacles, located in caretakers' environment, may prevent the timely presentation of children with pneumonia to a trained health worker. First, caretakers (usually the mothers) may have a perception of the etiology of pneumonia that is deviant from biomedical standards, and may therefore have recourse to other practices

(e.g. traditional healers, self-care) before seeking treatment by a trained health worker - if they do so at all (Malik Kundi et al., 1993; Aung et al., 1994; Stanek et al. 1994; Hudelson et al., 1995; McNee et al, 1995; Iyun & Tomson, 1996). Delay in seeking treatment by a trained health worker due to traditional beliefs and practices is considered a major cause of mortality due to pneumonia (Iyun & Tomson, 1996). Second, even when caretakers recognize danger signs of pneumonia and are convinced of the necessity to seek prompt assistance from a trained health worker, they may not be in a position to do what they think is most desirable. Factors in their environment, such as lack of transport or health facilities distance, social and cultural practices, and high costs of medical care, all may contribute to causing delays in seeking health assistance from a trained health worker, or not seeking assistance at all (Malik Kundi et al., 1993; Hudelson et al. 1995; McNee et al., 1995).

If the second component of the case management of pneumonia strategy, the enhancement of families' abilities to seek assistance from trained health workers, is to be successful, then the caretakers' knowledge gap and the factors in their environment should be addressed adequately. Therefore, the build-up of good health care services should be complemented with intervention at the level of the caretakers. They should be assisted to overcome obstacles on their way to prompt treatment. In this essay I will advocate an approach focused on caretakers. I am fully aware that the health care services should be supported to be able to deliver, but this is beyond the scope of my essay.

My approach is based on views about public health, generally known as “health promotion”, in which a central role is attributed to communities in activities that aim at enhancing their health status. Health promotion aims at “ ... enabling individuals and communities to increase control over the determinants of health and thereby improve their health.” (Stachtchenko & Jenicek, 1990). Inspired by this concept I suggest that health programme managers enable caretakers to identify and act upon those determinants in their immediate environment that either cause ARI, and more specifically pneumonia, in their children, or put obstacles in the way of correct treatment.

To enable caretakers to control certain factors of ill-health in their environment is encouraging their empowerment, viewed as “... the ability of people to gain understanding and control over personal, social, economic, and political forces in order to take action to improve their life situations.” (Israel et al., 1994) Empowerment entails learning and upgrading of skills. As to the question which tool can be used to enhance empowerment, I suggest the use of Participatory Action Research (PAR). PAR can link health education and training in life supporting skills in what is a process in which caretakers learn about the causes and symptoms of ARI and pneumonia in the community, and design solutions to overcome obstacles in the way of prompt or correct treatment. PAR is an application of the concept of experiential learning, in which learning is considered as adaptive to a person’s environment, and as a process that shapes a person’s behaviour, based on experience, reflection about this experience, and theorizing about desirable behaviour (Kolb, 1984).

## 2.1.2 Conceptual framework

My reasoning, which I will further elaborate in sections 2.2 and 2.3, can be represented in the conceptual framework below (see Figure 2.1). People's health status is to a great extent shaped by their interaction with their environment. Their behaviour (individual lifestyle, organizational measures of groups, policy making...) shapes or affects determinants that influence their health in a positive, or in a negative way. Health status leads to a certain degree of well being (although the latter is not dependent on health status alone). (Stachtchenko & Jenicek, 1990; WHO, 1986, 1997; Wallerstein & Bernstein, 1988).

Figure 2.1: Health status as a function of people's interaction with their environment

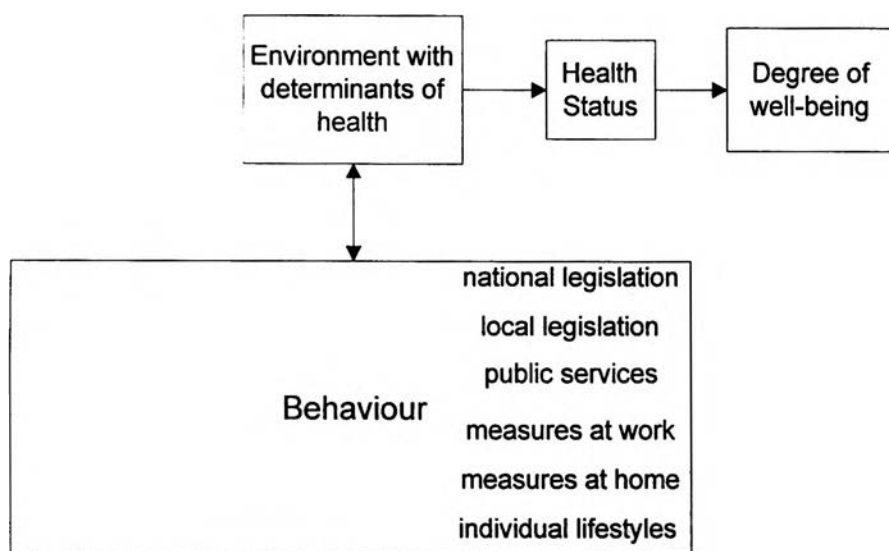


Figure 2.2 shows how PAR can be used as a method to (1) induce behavioural change as a means of (2) control of certain determinants of health in people's environment. Control means intentional and adequate behaviour in order to obtain a desired outcome. Control over certain health hazards in people's environment would thus mean deliberate action either to reinforce a beneficial effect, or to alleviate or

neutralize a negative effect. Attempts at control, that is, attempts to obtain an effect on the determinants of one's environment, lead to a health supporting environment, which in its turn will lead to a higher health status, and a higher degree of well-being .

Health supporting environments can be the result of behavioural change. Some health programmes can be considered as phenomena of behavioural change (as in Schoepf, 1993), be they of a complex nature.

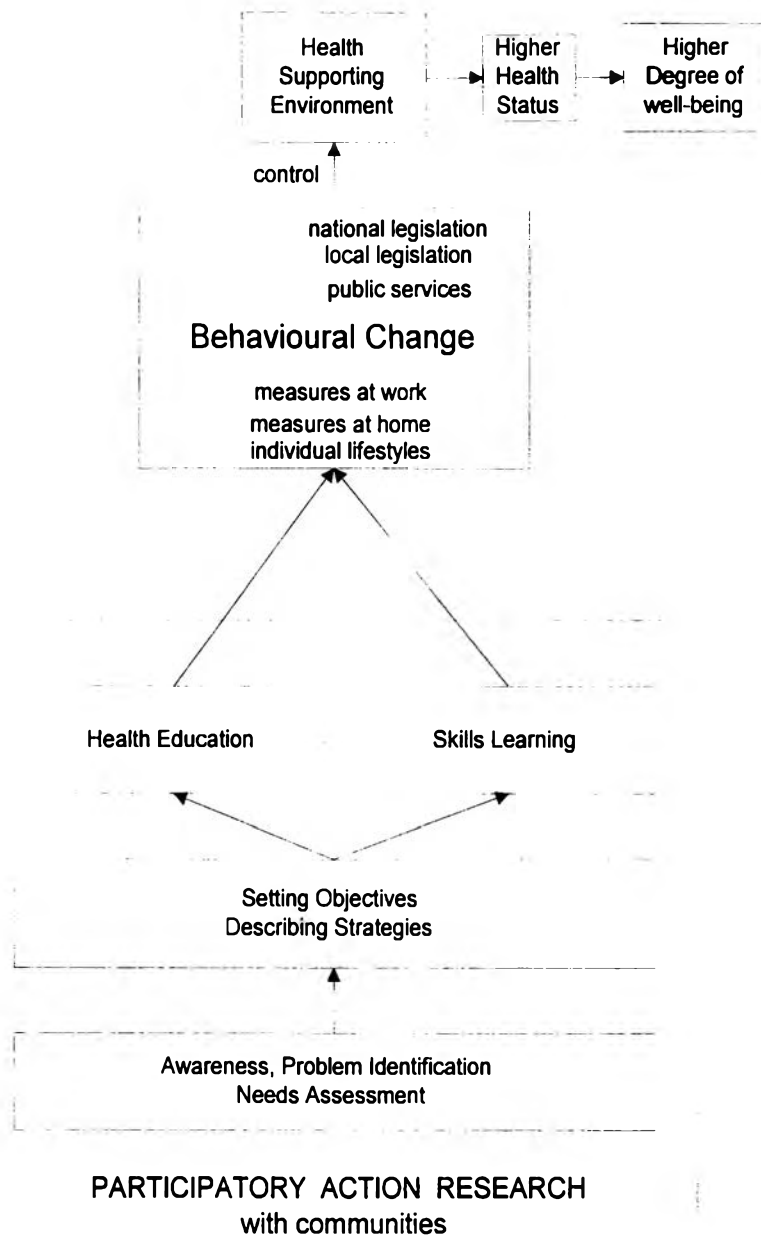
The behavioural change needed to have an effect on the determinants of ARI is very complex. ARI cannot be fought by a single form of intervention, nor by a single actor. Individuals, groups, communities, local and national authorities, all have a role to play. Next to changes in individual lifestyles, the adoption of certain practical or technical measures at home or at work, directly related to desired health outcomes, the intervention of health services, authorities' general public health decisions (WHO, 1986; Naidoo & Wills, 1994), there may also be a need to remove obstacles of an economic or social nature (Malik Kundi et al., 1993; Hudelson et al. 1995; McNee et al., 1995). This, again, can be at different levels (individual, community, local, national).

Communities, and more in particular caretakers of children, can act upon certain determinants of ARI in their environment. PAR can be used as a method to help caretakers of children to define problems, analyze their situation, assess needs, set objectives, develop a strategy, and implement it. In this process, (health) education and training in life supporting skills play an important role, because they provide particular knowledge about health issues, and enable caretakers to solve practical



problems. PAR, which is an exponent of the concept of experiential learning (Kolb, 1984), helps caretakers to reflect on their current situation, and to develop a theoretical framework for desired behavioural change: the action necessary to obtain a reduction of mortality due to pneumonia.

Figure 2.2: PAR as a tool for behavioural change



## 2.2 A Health Promotion Approach

Health promotion can be defined as “the process of enabling individuals and communities to increase control over the determinants of health and thereby improve their health.” (Stachtchenko & Jenicek, 1990)<sup>2</sup>. According to Robertson & Minkler (1994) there has been a radical change since the second half of the eighties in thinking about the determinants of health and strategies to achieve health. They speak about a new health promotion movement, the main features of which are:

- the definition of health and its determinants includes the social and economic context in which health or non-health are produced
- strategies to achieve health go beyond the earlier emphasis on individual lifestyle to encompass broader social and political strategies
- the concept of empowerment is a key health promotion strategy (individually and collectively)
- advocacy of community participation in identifying health problems and strategies for addressing those problems

I will refer to these features while I explore the notion of health promotion below.

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<sup>2</sup>This definition is drawn from Epp J. (1986). *Achieving health for all: a framework for health promotion*. It differs only slightly from the definition in the WHO Ottawa Charter for health promotion: “Health promotion is the process of enabling people to increase control over, and to improve, their health.” I prefer Epp’s definition because it is more precise.

### **2.2.1 A New Notion of Health**

As stated above, public health discourse produced new views with regard to the notion of health in the last decade. This development was marked by the emergence of health as a positive notion, rather than the negative one of absence of disease, which is preponderant in the epidemiological interpretation. This positive notion of health is fully present in the Ottawa Charter, that picks up the thread with the definition of health the WHO had accepted in its 1946 Constitution:

“To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs and to change or cope with the environment. Health is, therefore, seen as a resource for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capacities.” (WHO, 1986)

Defined like this, health contains two sub-notions. First, health allows people to achieve their potential, and second, health is function of people reacting positively to challenges of the environment. The first element - which I am tempted to stamp “humanistic” - stresses health as a resource, as a means towards other ends defined in a broader social context. With the second element, with its focus on the interaction between individuals and their social and physical environment, health is viewed not only as an individual, but also as a social product. Furthermore, it brings health gradually in a stronger ecological perspective (Stachtchenko & Jenisek, 1990; Naidoo & Wills, 1994; Robertson & Minkler, 1994).

This broad environmental and interactional perspective of health is reflected in WHO's health-and-environment cause-effect framework (HECEF)<sup>3</sup>. The framework has two functions. First, it is a useful tool to understand the mechanics of environmental impact on health. Second, it indicates the different causal levels where action can be taken to counter negative effects, and who are the potential actors (WHO, 1997).

The HECEF identifies five levels of causes that function in a way similar to a chain reaction. These five levels are: *driving force*, *pressure*, *state*, *exposure*, and *effect*. The *driving forces* will create broad conditions in which certain environmental health hazards can develop. They include policies that determine trends in economic and technological development, consumption patterns and population growth. Driving forces put *pressure* on the environment e.g. in the shape of depletion of resources, waste from human settlements, emission of pollutants, etc... Pressure on the environment may lead to concrete changes in the *state* of the environment, like the presence of toxic chemicals, deforestation. This in turn may lead to *exposure* of people to a certain hazard, e.g. a particular toxic substance, causing a health *effect* like a certain disease. Using this framework WHO tries to identify pathways of cause-effect that help to understand the multiple causes of one health effect or the multiple effects of one single cause. (WHO, 1997)

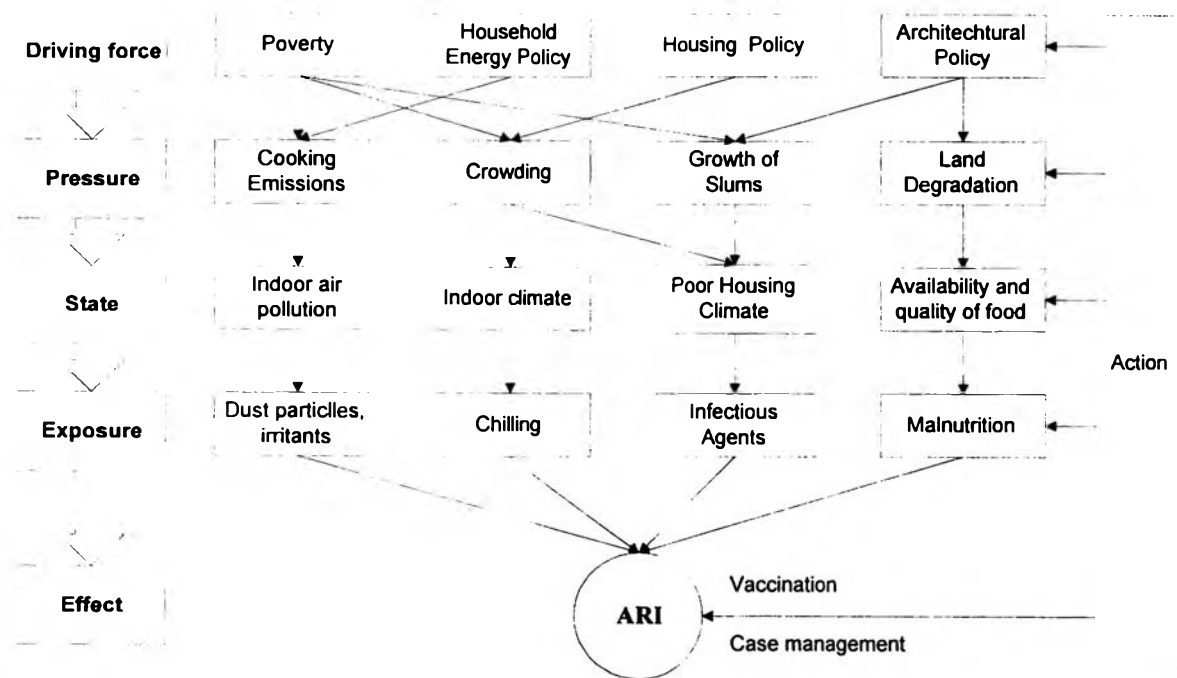
WHO applies the HECEF to ARI in children (see Figure 2.3). A driving force could be the housing policy of a government, inadvertently leading to the development

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<sup>3</sup>My own abbreviation.

of slums (pressure), which in turn results in poor housing quality of many people (state). Poor housing quality may favour the presence of infectious agents exposing the inhabitants to infection. The effect would be disease, e.g. pneumonia. Of course, there may be many causes at different levels, each of them contributing to one individual effect, like crowding and living in slums both affecting housing quality.

Figure 2.3: Health-and-environment cause-effect framework (HECEF) for ARI in children



Source: WHO (1997)

Action can be undertaken at all causal levels. Whereas action at driving force or pressure level is rather a matter of national public policy (e.g. encouraging decentralization of economic investments to reduce migration from rural to urban areas

as a measure to limit the growth of slums), action taken at state level (indoor air pollution, indoor climate, poor housing quality, availability of good quality food) comes more directly within reach of communities and local government. I will elaborate more on the action aspect in section 2.2.3.

### **2.2.2 Health Promotion Versus Disease Prevention**

Any strategy to achieve health will naturally depend on the contents of the concept of health. If health is seen as absence of a disease or a disorder, then adopting a correct lifestyle is assumed to be a good way to *prevent* the occurrence of this disease or disorder. If health is a resource, it can be found, fostered, or *promoted*. This explains a fundamental difference between *disease prevention* on the one hand, and *health promotion* on the other hand.

Disease prevention aims at reducing the likelihood that a disease or disorder will affect an individual or a group. Its model is medical and one of its main concerns is to understand the risk that a person has to become ill. Consequently it focuses on specific populations at risk (Stachtchenko & Jenisek, 1990). Health promotion, rather than focussing on a specific population at risk, targets whole populations. It helps them to identify risks factors in their environment and to act upon them by removing them, or alleviate their effects. The difference between disease prevention and health promotion is the difference between not falling ill and remaining healthy.

Yet, health promotion and disease prevention do not exclude each other. They can be viewed on a continuum from health promotion to disease prevention<sup>4</sup>, and their realms may overlap each other. Public health programmes may use either strategy, or a combination of both, or a combination with other strategies, like health education, depending on their specific objectives (Stachtchenko & Jenisek, 1990; Naidoo & Wills, 1994). Obviously, the balance of input of professional health workers versus lay people will vary according to the type of programme chosen. In programmes with a strong disease prevention focus the role of health professionals will be preponderant. They will design the programme on behalf of the target group and their main challenge will be of having their preventive measures accepted and applied by the target group. This is in sharp contrast with programmes with a strong promotion focus, where the involvement of lay people in design and implementation may be very strong, to the point of making essential contributions. Indeed, community participation is one of the main features of health promotion and this is mainly due to the realization that health is determined by people's way of life and their interaction with the environment (Stachtchenko & Jenisek, 1990). People, (individuals, organizations, communities...) are part of the issue and the solution. (The topic of community participation figures prominently in section 2.3).

### **2.2.3 Control and Power**

If health is determined by people's way of life and by their interaction with the environment, then they may have some leverage. The potential of leverage is expressed by the term interaction, meaning a two-way relationship between people and

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<sup>4</sup>With curative services and rehabilitation at the other end.



their environment. While people may undergo adverse environmental effects, in a more passive sense, they in turn are able to act upon their environment. They are able to adopt a behaviour<sup>1</sup> that is conducive to health. This active component of the interaction points at peoples' ability to *control* their environment.

Control is one of the central issues in health promotion, as expressed in the above quoted definition of health promotion. Exerting control means either to remove specific determinants, or neutralize, or weaken their effects, in order to avert their negative impact on the health of people. Looking back at the HECEF for ARI, one realizes that removing some causes of indoor air pollution, like indoor cooking or smoking, constitutes an act of control. In this sense is the mere fact of exercising some degree of control over one's immediate environment health enhancing. As Wallerstein & Bernstein (1988) point out, the degree of access to control measures has itself become a determinant of health.

Exerting control may be necessary at different levels, requiring different approaches, e.g. "the direct involvement of individuals and communities in the achievement of change, combined with political action directed towards the creation of an environment conducive to health." (Wallerstein & Bernstein, 1988) This view is matched by the different levels of action of the HECEF – in which action can be equated with attempts at control (see the description of the framework applied to ARI, p. 21) - and is also reflected by three of the five strategies for health promotion

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<sup>1</sup>I see behaviour as more than lifestyle. It refers to the whole of strategies leading to health people, at all levels in the decision making process, can adopt (see section 2.3).

mentioned in the WHO Ottawa Charter, showing how health promotion goes beyond lifestyle change (WHO, 1986). These three strategies are:

- to build a healthy public policy (through legislation, fiscal measures, taxation, and organizational change)
- to strengthen a community's ability to act (described as setting priorities, making decisions, planning strategies and implementing them to achieve better health)
- to develop personal skills, in schools, at work, at home, or in community settings (to be achieved through information, health education and the enhancement of life skills).

Like all goods of value to human beings, access to control measures is unevenly spread over populations. Not surprisingly, the degree of control an individual or communities have over their lives is often related to their socio-economic status. People with less skills and resources may not enjoy the same degree of control over determinants in their immediate environment that affect their health status as people with more resources (Israel et al., 1994). Therefore, it may be desirable to help them to acquire more *power* to boost their capacity to control. Power, related to the ability to exert control, implies both access to resources as the possession of skills that can be used to cause a certain effect on determinants in the environment (control). In this context the word "power" is not in the conventional way defined as power over people, or power to be taken away from other people (so called zero-sum power within a win/lose context), but as power to do something. Clearly, it is itself a resource, and in a context of participation and cooperation amongst people it is an expanding resource of greater shared power (Israel et al., 1994; Wallerstein & Bernstein, 1994; Bernstein et al., 1994).

#### 2.2.4 Empowerment

The process of acquiring more power is known as *empowerment*. In its most general sense “it refers to the ability of people to gain understanding and control over personal, social, economic, and political forces in order to take action to improve their life situations.” (Israel et al., 1994) This process is highly intentional by all involved, both the people who empower themselves, as by possible facilitators who assist them. Julian Rappaport describes it as a process of ability that all people have, but that needs to be released and that leads to:

“a sense of control over one’s life, in personality, cognition and motivation. It expresses itself at the level of feelings, at the level of ideas about self-worth, at the level of being able to make a difference in the world around us,...”

(Rappaport, 1985)

It entails learning, upgrading of skills, working at oneself. Without a strong will to become empowered there is no empowerment. Power therefore, cannot be given, it can only be taken by the ones who need it (Rappaport, 1985). Using grammatical terminology one can say empowerment is a reflexive verb: individuals can only empower themselves (Purdey et al., 1994). But the reflexive character of empowerment does not exclude that it may be the fruit of a concerted effort between people empowering themselves and outsiders - usually professionals - who act as facilitators. In such cases one can rightly speak of a partnership. Such partnerships play an important role in empowerment processes, or in health promotion activities in general (I will elaborate on this in my section on PAR (2.3)).

Empowerment can be located at different levels: the level of the individual, of the organization, and of the community. These three levels are linked with each other and this may have a strengthening effect on each level. The following analysis is based on Israel et al. (1994). Empowerment at individual level contains three elements: personal efficacy and competence, the psychological quality of sense of mastery and control, and a process of participation to influence institutions and decisions. An empowered individual can be an influential member in an organization, exerting more control on the decision process, allowing the organization to function better and in its turn to exert more control on the process of policy and decision making within its community. Therefore, it may be a strategy of organizations to enhance the empowerment of their members. One can speak of an empowered community when individuals and organizations use their resources and skills in collective efforts to meet their respective needs. This can be through the dynamics of providing support to each other and addressing conflicts within the community. As a result, the community acquires increased influence and control over its quality of life.

### **2.2.5 Empowerment and Quality of Life**

I think that the construct “quality of life” reveals the developmental dimension of community empowerment. Developmental activities and empowerment are closely intertwined with each other. In fact, a developmental process entails many capacity building functions, in terms of build-up of technical and interactional skills. Case studies (Purdey et al., 1994) illustrate how, by enhancing the interaction skills of a group of people and boosting their confidence level, development can be stimulated with the acquirement of more skills as an outcome. Thus, empowerment, both as a

condition and an outcome of development, may lead to sustainable health development. Some authors as Rifkin (1985) argue that the process of empowerment is more important than its output (meeting concrete needs). I personally think one cannot separate both and agree with Purdey et al. (1994) that there is a delicate balance between the process and outcomes in empowerment and (health) development, and that programmes will falter if they fail to produce tangible results. That is why Purdey et al. can state: “Underpinning health promotion is the concept of empowerment.” (Purdey et al., 1994) And indeed, if the lack of power or control affects people’s health, then health promotion needs to become an exercise in empowerment, so that communities gain more control over determinants that affect their immediate environments and lives.<sup>6</sup>

The ultimate goal to which all exercises of empowerment and enhanced control by people should lead is the promotion of surroundings that are safe, stimulating, satisfying and enjoyable, that is: conducive to health. Since the 1986 Ottawa Conference on Health Promotion they are known as “supportive environments for health”.<sup>7</sup> In contrast to a degraded environment, that poses threats to people’s health, a supportive environment “... is free from major health hazards, satisfies the basic needs of healthy living, and facilitates equitable social interaction” (WHO, 1997). In brief: health and supportive environments are considered interdependent and inseparable (Haglund et al. 1996).

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<sup>6</sup>In this respect it is significant that the definitions of health promotion and empowerment are quite similar.

In the next sections I will explore how the above-mentioned model of health promotion can be used to create a supportive environment for communities with a relatively low degree of access to health facilities, and in which children under five years old are particularly vulnerable to succumb to pneumonia. I will study the potential of the dynamic force of Participatory Action Research as a means to assist communities in learning about ARI and solving practical problems in the way to timely treatment of their children. While health promotion is the vehicle, PAR is the engine.

## **2.3 Participatory Action Research**

The process that aims at enhancing the knowledge and skills of a target group in view of improving their practice or quality of life is known under many terms: (Participatory) Action Research, Participatory Research, or Collaborative Action Research. They all refer to the same notion that is being explored in this essay and for which I use the term Participatory Action Research. However, when quoting authors I will respect their particular choice of a term.

### **2.3.1 Conceptual Similarity between Empowerment and PAR**

Empowerment is an attractive philosophical and ethical principle that needs strong strategies to help it fulfill its potential and I believe that PAR is one such strategy. This is so much so as the conceptual framework of PAR is built up along the same lines as the notion of empowerment. This becomes obvious when we compare the two notions with each other.

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<sup>1</sup>Supportive environments for health belong to the five health promotion strategies

Empowerment defined by Israel et al. (1994) as “...the ability of people to gain understanding and control over personal, social, economic, and political forces in order to take action to improve their life situations” stresses three elements: learning (“understanding”), acting (“control”), and improving people’s life situations. These three elements are present as well in Maguire’s definition of participatory research which I found in Wang et al., (1996): “Participatory research is a process of collective, community-based *investigation, education and action for structural and personal transformation* (italics added).” The similarities between both definitions are highlighted in the table below:

Table 2.1: Similarities between Participatory Action Research and Empowerment

Definition of Participatory Action Research	Definition of Empowerment
Investigation, education	gain understanding
Action	gain control over
Personal (transformation)	personal forces
Structural (transformation)	social, economic, and political forces
Structural and personal transformation	improve life situations

Source: based on Maguire (in Wang et al., 1996), and Israel et al. (1994)

I propose to investigate the method of PAR as a means of implementation of the philosophy of empowerment in concrete programme settings. PAR is a well

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withheld by WHO to achieve health.

suitable instrument because while following the same conceptual logic as empowerment, it provides practical guidelines to achieve this end.

### **2.3.2 Different Degrees of Empowerment in Different Types of PAR**

Even though PAR enables people to empower themselves, the degree of empowerment they achieve will vary according to the character or the objectives of each particular project. So, one may want to ask who has an interest in, initiates, and benefits from a PAR project. Answering “who?” can be very revealing as to the character of the participatory project in question (Cornwall & Jewkes, 1995).

PAR can be carried out under the impetus of *scientists* who want to answer purely research oriented questions; or on request of *company management*, who aim at improving staff performance; or of *professional practitioners*, who see a need to upgrade the services they render to their clients; or of *communities* who want to solve certain practical problems in a bid to enhance their quality of life. In each case the origin of the project, the definition of the problem as well as the setting of criteria to judge whether improvement has occurred, the degree of participation of all actors involved in drafting the design, and the people benefiting from the results, will be different. Two examples, both very different in nature, help to understand this. When in the forties Kurt Lewin designed his now famous research at the Harwood factory in Virginia, he was interested in exploring a possible relationship between the degree of democratic participation in the workplace and the level of satisfaction, output and morale of the workers. Some would stamp his research as a kind of social engineering,



mainly in the interest of the employer<sup>8</sup> (Hart & Bond, 1995). The nature and intent of the Harwood factory research contrasts sharply with instances of community development related PAR, based on the principles of Paolo Freire, which, in the spirit of social justice, explicitly intend to liberate people from oppressing socio-economic conditions (Wallerstein & Bernstein, 1988; Anisur Rahman, 1991).

Hart & Bond (1995, 1996) have developed a typology of PAR, based on a discussion of the above mentioned issues. For participants of a PAR project it is a useful model that can help them to recognize the character of the particular phase through which their project goes and the dynamics that can be expected amongst all the participants. For me it is a model that enables me to point out exactly which kind of PAR I think is desirable in the context of a community of caretakers of children aged less than five with restricted access to resources. Hart & Bond (1995, 1996) discern four types of PAR: *experimental*, *organizational*, *professionalizing*, and *empowering*. These types are *ideal* types that may not be found as such in reality, but they help to understand the “position” of a project with regard to some vital issues, such as who defines the problems and who will benefit from the solutions that are being developed.

A) Experimental:

This relates to a context of experimental science. The aim is to generate knowledge that may or may not be used by policy makers. The initiative comes from a researcher, who is also the main beneficiary. The objects of the research do not participate in the research design and there clearly is a subject - object relationship.

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<sup>8</sup>Kurt Lewin seemed to have been aware of the manipulative character of his research,

#### B) Organizational:

This relates to a context of organizations with varying degrees of complexity, such as commercial companies, hospitals, non-governmental agencies, etc... The aim of the research is to analyze a situation that is deemed unsatisfactorily by the management and to find appropriate solutions that can be implemented. The persons in charge take the initiative and formulate the problem, possibly in cooperation with the researcher that has been contracted from outside. The beneficiary is in the first place the management who aims at a better organizational performance, but the subjects of the research, e.g. workers, employees, members, may also benefit from improvements in their particular work situation. The subjects of the research may not be voluntarily involved in the research, nor are they involved in the design, but the researcher may decide to involve them in certain aspects as a means to come closer to their perspective or generating information that otherwise would not have been accessed. Even though the subjects of the research may have acquired a more active, participatory role, the relationship with the researcher is still very much characterized by the polarization of subject - object.

#### (C) Professionalizing:

This relates to a context in which a relationship between a professional and his or her clients is central, e.g. health staff - patient. The initiative comes from the professional who wants to improve his/her practice in view of benefits to the client.

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but considered it at the same time as a force of change.

The set-up of such a type of research may not differ very much from the organizational type, as does the involvement of the client.

*D) Empowering:*

This relates to a context where the “objects” of the research not only have decided themselves that there is a need of researching some issues, but also participate actively in the design. The participants may feel a clear need for improvement of their situation and therefore engage in the research. Although they may request specialists to assist them with certain technical aspects of the research, they remain in charge of the whole process. The end result of the research process is both new knowledge and an improved living or working environment for the participants. It is empowering because the participants have acquired greater control over their lives by learning how to investigate their situation and take action to improve it.

Just as in reality none of these four types may exist in a pure state as described above, PAR processes may shift from one type to another. An organizational type of research, led by an independent researcher on request of the manager, may evolve from low participation of the members to a higher degree of participation, with the members gradually acquiring a greater interest in the research, and proposing changes to the design and objectives. For the participants such a development would clearly have empowering consequences.

The four types of PAR can be represented on a continuum with the experimental type to the far left and the empowering type to the far right, reflecting different models of society, from a consensus model to a conflict model, or different

views of change ranging from rational social management (imposed or proposed top-down) to structural change from within:

Table 2.2: PAR continuum

<b>experimental</b>	<b>organizational</b>	<b>professionalizing</b>	<b>empowering</b>
<i>from</i>	research on people	<i>to</i>	research with people
	no participation		high degree of participation
	rational social management		structural change
	consensus model of society		conflict model of society

Source: based on Hart & Bond (1995 & 1996)

The type of PAR I consider most appropriate within the context of this essay is the empowering type. Whenever speaking about PAR, I will have this type in mind, with its characteristics of a high participation of the targeted communities in problem definition, project design, and development of criteria to judge progress, while it is these communities who benefit from the project results: empowerment, higher health status, better quality of life.

### 2.3.3 Paolo Freire's theory of empowering education

One of the pillars of the empowerment type of PAR is the Brazilian educator Paolo Freire (1970). The strong notion of empowerment that is at the core of his educational theory was provoked by the widespread instances of social injustice he witnessed in his country in the fifties and sixties. Freire's aim is to re-shape education as an instrument to reverse social injustice.

Oppression can be consolidated in many ways, one of which is the promotion of an educational system that prevents the emergence of a critical awareness in people. The backbone of such a system is the authoritarian relationship between teacher and student, in which educational communication is reduced to what Freire calls “depositing” knowledge in the minds of the students. According to Freire true liberation starts with reversing this authoritarian relationship and replacing it by a team of co-investigators with equal status, who explore their world through a critical dialogue and learn from each other’s feed-back.

The focus of this dialogue is the world and the way the students exist in the world. The method Freire advocates is “problem-posing”, in which people learn to see familiar issues (like certain social practices) as a problem. By asking “why-questions” they gradually develop their critical powers. This leads to the awareness that the world is in transformation and transformable. Eventually, they may perceive their living conditions as unsatisfactorily (or “limited”) and therefore as challenging.

A further step in the process is set when people realize that it is in their power to overcome their limit-situations by acting upon them. But even though a situation that limits people can be overcome, the improved situation may disclose new limits that need to be acted upon. This process is what Freire calls “praxis”, a chain of action of, and reflection by people upon their world in order to transform it.

Many elements of Freire’s liberation praxis underpin empowering PAR:

- Teacher and students have an equal status and the functions of learning and teaching may be interchangeable
- The dialogue between the equal partners leads to true education (learning)
- The participants in this process reach an awareness of their own limitations through the problem-posing method
- Learning takes place as a function of action and reflection and its aim is transformation

Typical of Freire's method of transformation is that people travel from a situation that limits them towards a better but unknown destination. This journey occurs through a dialogue between a facilitator and participants, in which the participants realize their own limitations and potential and which motivates them to move forward by acting. Reflection is at the core of this dynamic process. It precedes and follows action, like one would take a break after putting some effort in an action, evaluating its consequences, and moving to more action. Reflection implies each time again analyzing a new and unknown situation, and using the results of this analysis to plan for new action. As a consequence, each new situation may reveal new needs, to be translated into new objectives, as well as new steps to be taken to reach these objectives. Ultimately, the end result is open. Such a process differs from a linear course, in which people try to achieve clearly described and concrete objectives by following carefully chosen and planned steps. On the contrary, it is cyclical in nature and this is typical of any PAR project. I will discuss this cyclical process below, which will be an opportunity to point out some important characteristics of PAR, or conditions to make it successful (see 3.5, 3.6 & 3.7).

#### **2.3.4 The cyclical nature of PAR**

As stated above, any PAR process is open-ended. Participants may agree that they want to learn about themselves and their environment and improve their situation, but it may not be easy to give a clear description of the problem issue, let alone to set a concrete objective. Even if it were simple to set a detailed objective from the outset, the full order of sequences or formal steps to be taken to reach that outcome would not be easily determined. Given the reflective character of PAR each step depends on the outcome of the previous one. Therefore, the whole process is highly flexible and iterative, as opposed to a linear model of progression. (Hart & Bond, 1995). Yet, even though each process of PAR is unique, many processes are likely to go through the following phases:

##### **A) Concern**

This is related to who takes the initiative and to access to potential participants. Someone expresses a concern about a certain situation. There is a sense that there is a problem, or that a certain issue should be studied, but there is no problem statement yet. If the concern is formulated by a researcher, then often the communities upon whom the research will be carried out are not involved, which raises the issue of researchers acquiring access to them. If they have not requested any research activities the researchers may be perceived as intruders. Building trust should start in this phase and can take the form of contracts between all parties involved.

## **B) Problem identification, information gathering**

This is a very important phase. Researchers and communities try to obtain a clear picture of what the problem is. Researchers and key informants engage in a dialogue. There may be a need to acquire information (see further), as well as for the researcher/facilitator to boost the community participants' self-confidence. This is a crucial phase with regard to the formation of a sense of ownership of the research process by all parties involved, especially the participants from the communities.

## **C) Investigating alternative solutions, planning for action**

An inventory is made of possible solutions, means available to the community to implement each solution, following which one or more courses of action are adopted. Action could be seen as a hypothesis that should be tested in reality (Criel et al., 1996). It is important that in this phase a decision about monitoring and evaluation procedures is being made.

## **D) Action**

The participants carry out the action as decided in the previous phase and "test it out". They make observations on its different aspects.

## **E) Reflection, evaluation**

Based on their observations during the action the participants discuss alternatives that would lead to improvement. The "action hypothesis" of phase three is being "rejected" or amended. There may be room for negotiation here since researchers and community participants may have different interests and will have to



reconcile them (e.g. with regard to drugs use there is a need to find a practical solution acceptable to the community that satisfies medical criteria as well).

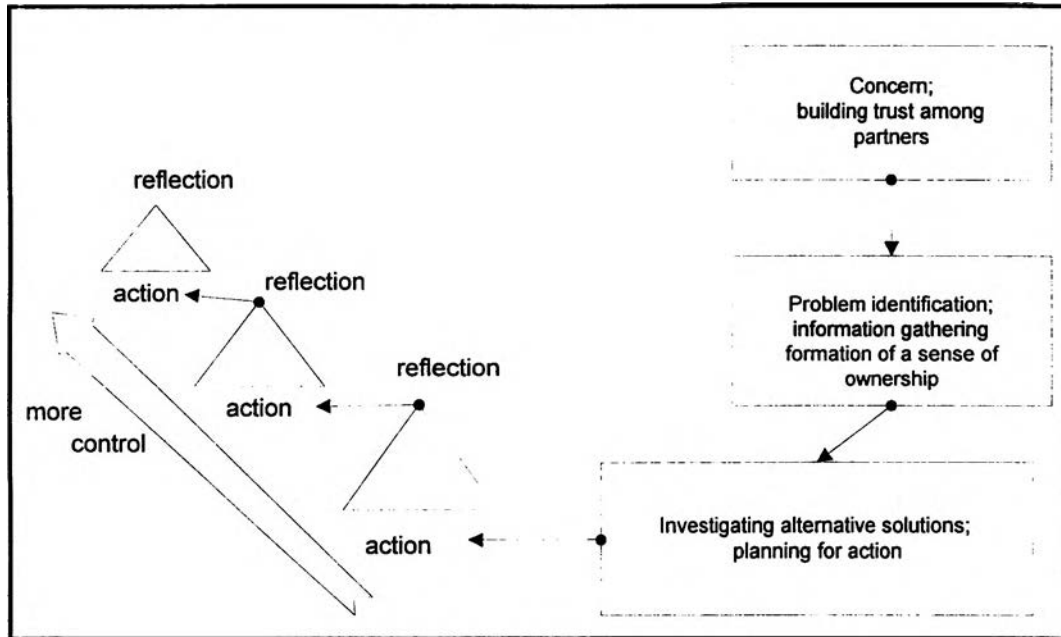
Reflection by the participants on their passed action is important to avoid that they become dependent on outsiders (Gianotten & de Wit, 1991). May be most important of all is that the participants through reflection and control of the program change their norms themselves and thus adapt their behavior, as opposed to behavioral change induced from outsiders using merely advice or recommendations (Eisen, 1994).

#### F) Possible redefinition of the problem, new action

The reflection may also lead to redefining the problem, possibly resulting in a new search for information. Ultimately a new course of action can be defined with all its implications of observation and reflection.

I have chosen a graphical representation to illustrate the spirit of the above-described process (Figure. 2.4):

Figure 2.4: Participatory Action Research Model



Source: Adapted from a model of community empowerment for health (Purdey et al., 1994)

That an empowerment model could be used as a basis for a model of PAR is not accidental and gives a strong indication of how closely both notions are linked with each other.

### 2.3.5 The role of the facilitator

The dual character of PAR, both as a way to generate more knowledge, and as a way to enhance social change, leaves any outsider that initiates a project either more as a researcher or more as a community worker, depending on his/her perspective and interest. In fact, even persons with a strong research perspective will find it difficult to escape, if not the role of a community worker, than at least one of a facilitator. I will use the term “facilitator” to designate the person that is involved as an initiator and - indeed - facilitates the course of a PAR project. However, consistent with my option

for the empowering type of PAR, I will use a notion of facilitator that tends to be closer to the one of a community worker than to the one of a researcher.

The facilitators' attitude should reflect the basic principles of empowerment of participating communities. Consequently, they should make sure that all thinking and activity emanates from the participants themselves. This idea is in line with Freire's problem-posing method that focuses on students' perceptions about the world in which they live. It requires strong discipline from the side of the facilitators to try to understand the participants' views and accept them as a starting point, even if they may conflict with their own opinions (Chambers, 1987). An interesting affirmation of this credo and what it implies is given by Stringer (1996), who quotes a group of Australian community workers characterizing their own role. Considering themselves as catalysts, they do not impose, but stimulate people to change by addressing issues that are of concern to them. Thus, they enable people to develop their own analysis of their issues, starting where people are, not where some outsider thinks they ought to be.

Facilitators can use social skills to stimulate participants' self-confidence, enhance communication, and promote viewing familiar and complex situations from a different angle (Whyte, Greenwood & Lazes, 1991; Maclure & Bassey, 1991). Indeed, in the beginning of a project the facilitator may need to stimulate the participants' confidence in their own capacities. This is more than just affirming the validity of what they know, or giving direction. It is essential facilitators and participants get to trust each other. An interesting feature of such a process of confidence building is a sort of

equalizing movement in which the facilitators relinquishes their superior status of specialists, and assume, in a Freireian way, a status equal to the participants'. This shift, the transformation of the relationship between facilitators and participants from *subject-object* to *subject-subject*, (...) is an essential feature of PAR and implies that the facilitator does not pretend to know the problem situation any better than the participants. Since all participants possess some kind of knowledge -- reflecting different perceptions of people in different situations -- each participant (including the facilitator) is deemed to be a source of valid knowledge of equal importance. As a consequence, each participant's contribution to the project is deemed essential and irreplaceable. The most important implication of facilitators' positions as equals amongst equals is that they do not know "the solution" to the problem, and that the participants themselves are in a right position to furnish all the elements that may set off the process that eventually leads to a solution. In a strongly political interpretation of PAR, in which the generation of knowledge is linked to social power, and its use to the interests of the elite, PAR is considered as returning to the people the legitimacy of knowledge they are capable of producing, and using it as a guide for their action (Anisur Rahman, 1991).

The cooperation between facilitators and participants can take the form of the participants steering the course of the research process, but receiving training in data collection by scientists, as in an Arizona Healthy Cities project (Rains & Ray, 1995); or of co-researchers, with each group specialized in a certain field (e.g. agricultural scientist at a research institute vs. farmer on his farm (Maclure & Bassey, 1991). Since the position and responsibilities of co-researchers may be different they may well want

to conclude their cooperation in the form of a contract, specifying tasks, commitments, duties, and responsibilities of all the contractants. So, Karlsen states that:

“ Action research does not mean that the researcher should or can relinquish his or her specific professional contribution and responsibility by becoming victim to some misunderstood “democracy” in thinking that everyone can take part equally in every step of the research process” (Karlsen, 1991)

In extreme cases of empowerment the researchers or facilitators may become gradually marginalized in the process, with the participants reaching the conclusion that they can do without them. As Hart and Bond put it: “This is one of the risks the action researcher takes when working in a participatory way.” (Hart & Bond, 1995). But is it a risk or the purpose of PAR? Some voices assert that external agents should take conscious measures to make their role progressively redundant (Tilakaratna, 1991).

### **2.3.6 A Sense of Ownership**

The facilitators bowing out of a project can also be viewed in terms of ownership of the project. Such a move would involve a hand-over period, in which all programme responsibilities handled by the facilitators, are being transferred to the participants, who would shoulder all the responsibilities, and continue its implementation amongst themselves. In other words: the participants would have acquired full ownership of the programme.

I think that the notion of *sense of ownership* lies very much at the core of what determines success or failure of a PAR project. Therefore, it is imperative that PAR facilitators allow participants to acquire a sense of ownership of the project.

According to Gow & Vansant (1983) people organize best around problems they consider most significant. I think it is reasonable to expect that if people organize around their problems and carry out certain activities, it is in the hope to meet their needs. Equally, if some outsiders would propose to a community to set up a development project, one would expect the community's participation in its implementation on the condition that they are convinced that the output would go some way in covering their needs<sup>9</sup>. This implies that outsiders avoid the trap of viewing communities' needs from their perspectives as outsiders or professionals. Oakley (1989), for example, sees a gap between the needs defined by "the people" and the medical needs defined by health professionals and advocates the use of scarce resources to cover needs as defined by the people.

When considering the felt needs of the target population, the stage of preliminary discussions and negotiations with all groups involved, is vital for success (Hart & Bond, 1995). It is in this stage that opinions and views are exchanged amongst potential partners, that attention is drawn on their reciprocal positions and interests, that trust is built, and agreements for further proceedings are made. Facilitators should focus on the problems the potential participants already "own", to use Hart's & Bond's (1995) adequate expression. As Green (1994) points out, early involvement of

communities in the planning of health services should be followed by continued interaction with them, throughout the various planning phases. This should enhance a sense of identification with, and belonging to the programme (Rifkin, 1985). Rifkin's use of the terms "identification" and "belonging" characterize what is more generally known as *a sense of ownership*, acquired in the process of involvement in a project of which one knows it is for one's own sake. This idea is nicely expressed by Kent (1988): "Plans become the people's own - owned by them - only when they work out the plans themselves."

Ownership of a project implies the need to make decisions, and this implies the recognition of the right to make decisions, ultimately given shape in a certain degree of decision making power. But professional project planners can erode the decision making power of project participants by determining in advance the sequence of project phases and the tools to be used in the project. As Hart & Bond (1995) rightly affirm, this would go against the sense of ownership of participants. In this regard one can note the inherent vagueness of Green's (1994) above-mentioned notion of interaction between planners and communities, which does not specify the degree of decision making power communities have in the planning process.<sup>10</sup>

To have decision-making power means more than being invested with the authority to make decisions, it also requires the capacity to make the right decisions. It

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<sup>10</sup>I make abstraction of social and political factors that may influence communities' participation in a project.

<sup>10</sup>This points at an issue widely covered in the literature, about the degree of participation communities really enjoy in the planning process of a project. However, this topic is beyond the scope of this essay.

is surely one of the credo's of thinking about community participation that local people are able to make rational decisions in the context of their own environment and circumstances (Gow & Vansant, 1983), and there are many development project reports to witness this. For example, Maclure & Bassey (1991) describe how farmers in Togo, from their own perspective, come up with innovative ideas that, through the process of cooperation with university researchers, lead to improved maize storage techniques. But people may lack organizational skills; like the ability to: form committees & conduct meetings, to attract and pool resources to embark on a common enterprise, to manage common funds & hold leaders accountable, to choose capable leaders, to make informed decisions (Gow & Vansant, 1983); needed to perform adequately in a project and here is where the facilitator steps in. Capacity building at individual, organizational, or community level are necessary support activities enabling people to upgrade their project management skills.

Eventually, the notion of ownership has lead us, through the notions of decision making power and capacity building, back to the notion of empowerment of people. In development thinking none of these notions can be dissociated from each other.

### **2.3.7 Internalization**

The notion of ownership I discussed above covered roughly three stages of a project: people define their own problems, make their own plans, and carry out the implementation.<sup>11</sup> The drive comes from within the community, which is why the participants develop a sense of ownership of the programme. Kent (1988) gives an

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<sup>11</sup>A further stage is evaluation.



indication of what is crucial in this process: “When plans are generated by the people who are to act them out, so that the goals and the *motivations* are wholly internalized, implementation becomes less problematic (italics added).” With “less problematic” Kent presumably alludes to situations known by many community development workers in which the community apparently is not highly motivated to participate in activities yet designed for their own good. People don’t like to implement ideas formulated by others, Kent maintains. Indeed, motivation makes the difference, and it seems that people often are more readily motivated to work out their own designs than someone else’s (especially if they don’t think that the latter will help them meet their needs). This may also be true for health development programmes.

The goals of health development programmes often contain elements of behavioural change. But behavioural change may not be obtained by transmitting health messages alone. If not used within a proper framework, health messages may be perfect examples of what Paolo Freire called deposits of knowledge in students’ minds. Students may understand the “deposits”, but when they come top-down, the knowledge they contain is not theirs. Schoepf’s (1993) educational practices with women offer an example of how important it is to set the right learning climate, if new knowledge about health issues is to lead to behavioural change. Her practice is based on experiential learning, a process in which the activity of the learner is central.

The experiential learning model (Kolb, 1984), explains learning, viewed as achieving new knowledge, skills, and attitudes, as the result of the learner’s confrontation with four conflicting modes of relating to the world, which require

him/her to make a use of four different kinds of abilities: (1) concrete experience, (2) reflective observation, (3) abstract conceptualization, (4) active experimentation. In order to learn, individuals must:

- involve themselves in new experiences
- reflect upon these experiences
- create concepts that integrate their behaviour in logically sound theories
- use these theories to make decisions and solve problems

From this perspective, learning is more than just acquiring knowledge, e.g. in the form of health messages, but it "...involves the integrated functioning of the total organism – thinking, feeling, perceiving, and behaving." (Kolb, 1984). As implied in Kolb's statement, behaviour cannot be separated from this learning process. Rather, a person's experience, reflection, and conceptualization help shaping his/her behaviour.

These notions are useful to help understand how behavioural change for health can be stimulated. In a context of experiential learning, health messages would blend with a person's whole life situation. They would not merely being added to his/her knowledge, in separation from his/her concrete experience or needs. On the contrary, health messages would belong to the material that feeds the learning process in which experience, reflection, and conceptualization lead to behavioural change.

The concept of experiential learning underpins the notion of behavioural change through PAR<sup>12</sup>. As is illustrated by Schoepf's experiences, PAR creates, or reinforces, the conditions for experiential learning in a specific, health related context.

Schoepf's aim was to help women in Kinshasa's popular neighborhoods to gain knowledge about HIV transmission and generate ways to protect themselves against infection. Inspired by the theory of experiential learning, she did not give advice, nor produce health messages, but rather stimulated the women to make their own situational assessment and to decide which action to take. She used the problem-posing method to help kick off the learning process, and encouraged the participants to search for solutions. She found that the learning process was stimulated by the participants' emotional response to the situation presented, and by the exchange of experiences amongst group members. Gradually, the participants would acquire a greater understanding of the issues under investigation. They discovered things, reflected upon their discoveries, and drew generalizations from them. Using this method Schoepf succeeded in enlarging the participants' knowledge on HIV transmission and AIDS, and stimulating them to take preventive actions (although the wider socio-economic context continued to put constraints).

Schoepf's approach to learning can be an important component of health development programmes that want to stimulate behavioural change. Participants who have been involved in the earliest phases of a health development programme, during

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<sup>12</sup> It may not be easy to avoid going round in circles. So, Kolb also considers Lewin's model of action research as part of the overall thinking process that led to the concept of experiential learning.

which the problems are defined, have become involved in an awareness enhancing and learning process that will enable them to have an input in discussions that aim at setting the programme goals. In this process they may realize that they need to learn more about the health issues at stake, and therefore request sessions of health education. Equally, they may feel the need to acquire certain life skills and opt for training sessions. Such a (long term and iterative) process may result in the awareness that a certain behaviour, or certain practices prevalent within their community, are not desirable for their negative impact on the community's health. Such an awareness entails a change of norms: new convictions about what is desirable or acceptable emerge. They may, in their turn, lead to different behaviour. Behavioural change conceived like this is the product of autonomous thinking of the participants. The new norms have been *internalized*, they come from within, not from without. Such a process increases the chances of successful change: "When a community is defining its own problems and controlling its own programs, strategies that require change in community norms are more likely to be successful than if outsiders attempt to impose new norms." (Eisen, 1994)

Other factors will affect (or reinforce) the above described process. So, the theory of the diffusion of social innovations, defines conditions and processes by which new ideas and practices become adopted in a culture, and identifies factors that can accelerate or impede their adoption (Harper Howze & Redman, 1992). Some of these factors are: (1) the characteristics of the innovation (or behaviour) that make it attractive (compatibility with existing values, norms, and beliefs; the relative advantage over existing practices; and the ability to be adopted piecemeal, rather than

in its entirety); (2) competition with other innovations; (3) the role of opinion leaders and change agents.

## **2.4 PAR Applied To ARI**

I will use the PAR cycle, which I presented in section 2.3.4, to investigate the conditions and circumstances that would allow to apply PAR as a tool to assist a community of caretakers of children aged less than five, to gain an understanding of the determinants that favour the incidence of ARI, and to determine realistic strategies to act upon these determinants. During this study I will assume the position of a health programme manager, whose main mandate is to contribute to upgrading the health status of a target population in rural areas in a country of the developing world. However, before reviewing the PAR cycle, I will give a brief overview of factors that affect transmission of ARI (section 2.4.1), the determinants of ARI that can be acted upon by communities (section 2.4.2), and the health and educational objectives health workers can set (section 2.4.3).

### **2.4.1 Factors that affect transmission of ARI**

Infectious agents of ARI may be as diverse as bacteria, viruses, chemicals, allergens, gases, or dusts. They are mainly airborne, infecting people by inhalation (Martin, 1984), although direct contact between people and subsequent self inoculation may also be an efficient means of transmission (Riley, 1985). The standard of living in rural and peri-urban areas of developing countries, or poverty, is associated with some environmental factors that increase the risk of transmission. Some of these factors are

malnutrition, incorrect breastfeeding practices, indoor cooking, indoor smoking, crowding, bad hygiene, and chilling (Pio, Leowski & ten Dam, 1985; Riley, 1985; WHO, 1997).

#### **2.4.2 Determinants of ARI that can be acted upon by communities**

Caretakers can protect their children against pneumonia by applying some rather simple preventive measures, like breastfeeding until the child is six months old, giving correct feeding, providing a diet rich in vitamin A, immunizations (before the child is one year old), and have children who do not breastfeed sleep alone to avoid the spread of cough and colds. Other possible measures, pertaining to elementary hygiene and considered preventive against diarrhoea, are also applicable in the case of ARI, e.g. washing a child's hands often, or washing a child's face at least once a day.

When children suffer from an ARI, their families can treat them at home: continue feeding (breastfeeding or mother's milk, or other meals for children who do not breastfeed); continue giving fluids; keep the child warm, but not hot; clear the nose (especially before breastfeeding or sleeping); aerate the room; avoid indoor pollution through tobacco smoke or cooking fires); avoid spitting and sneezing close to a sick child; and avoid contact of people with colds and coughs with babies (UNICEF, 1993).

UNICEF's preventive and treatment measures are related to determinants of ARI that communities can act upon with their own means and efforts if certain conditions are fulfilled, like access to material resources and to knowledge. Access to resources and knowledge is conditional for correct hygiene, feeding practices, and

health care practices. I adapted WHO's HECEF for ARI (described in section 2.2) to illustrate how the application or neglect of the above-mentioned measures influences infections that cause ARI, which in their turn may lead to pneumonia (see Figure 2.5). A case of pneumonia could be the consequence of a badly treated and therefore deteriorated cold (e.g. because there are no blankets to keep a child warm at night). The cold may have been enhanced by the child's reduced resistance (due to malnutrition) to infectious agents whose prevalence in the child's environment may have been increased by unhygienic behaviour or living conditions. The three types of practices (health care, hygiene, and feeding) that determine the risk of infection are themselves functions of access to material resources and to knowledge. These two are again determined by what in the HECEF is called *driving forces*, such as poverty, degradation of the environment, lack of education, harmful traditional strategies, etc.<sup>13</sup>

The framework can be reversed (see Figure 2.6). So, national and local policy measures can reduce poverty or degradation of the environment. PAR exercises can equally boost a community's economic and social development. This can lead to more access to material resources, (health) education and training. Access to resources enhances the adoption by caretakers of correct practices of hygiene and feeding, which are instrumental to limit the risks of infection. Good nutrition will reduce a child's resistance against infectious agents, whose prevalence should be reduced by good hygiene. But should infection occur anyway, then correct treatment of a child with a ARI (e.g. timely recognition of danger signs and referral) may prevent the fatal degradation of its condition.

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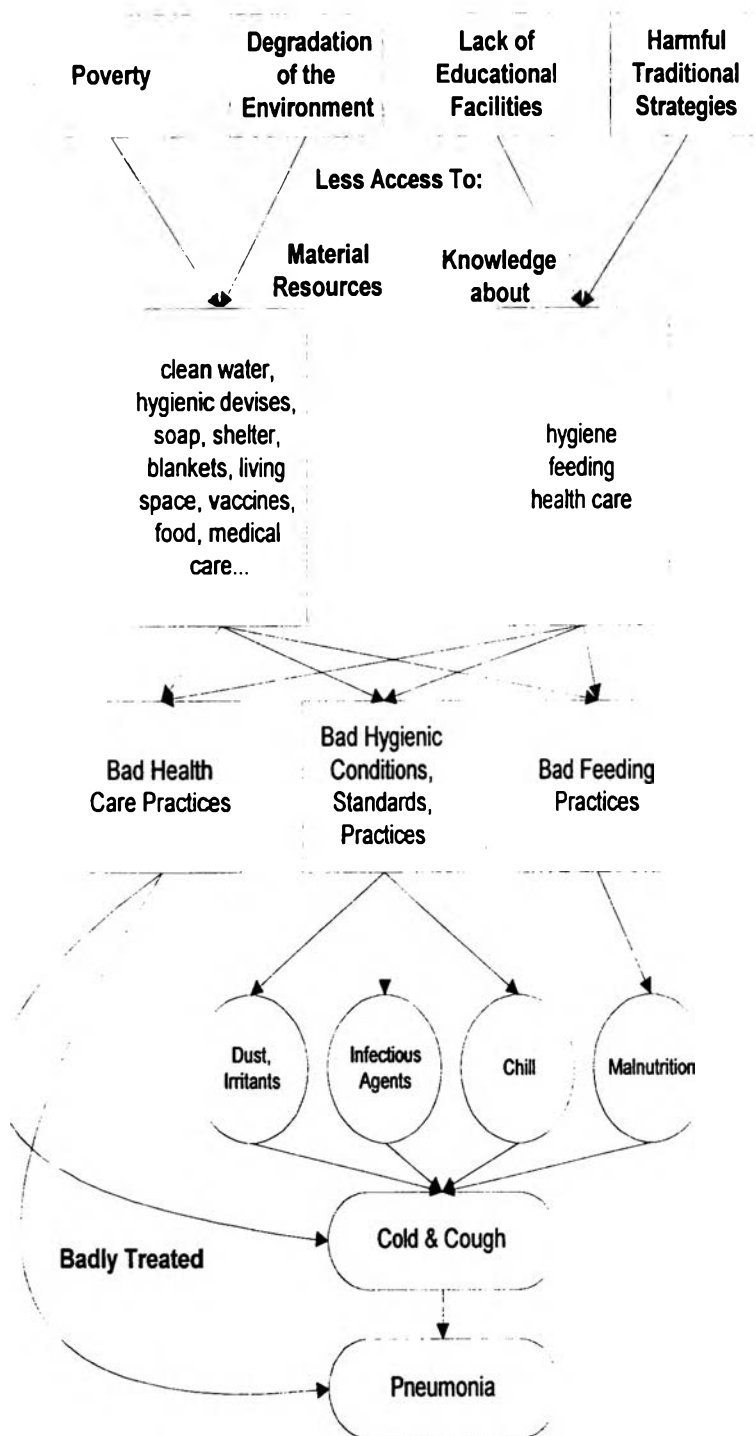
<sup>13</sup>The list is far from exclusive. Other driving forces could include lack of transport,

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security, politics, etc...

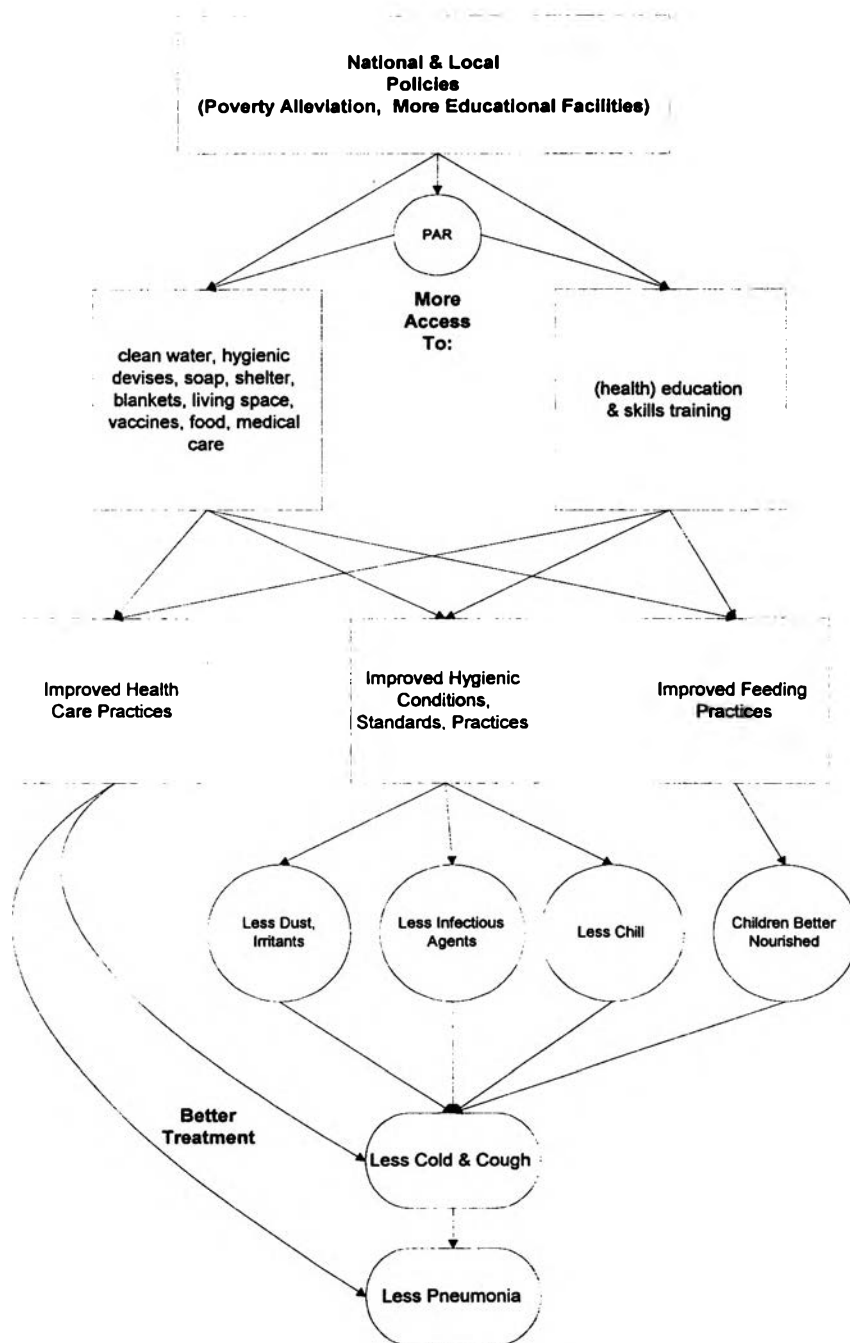


Figure 2.5: Determinants of ARI



Source: Adapted from WHO (1997)

Figure 2.6: Acting upon determinants of ARI



Source: Adapted from WHO (1997)

Qualifying preventive measures against ARI as rather simple may sound ironic to those who do not have the means to apply them for lack of resources (e.g. fruits and vegetables with a high content of vitamin A., or clean water). Some of these measures may sound hardly realistic to other people, like in some areas of Africa, where the smoke of indoor cooking helps keeping mosquitoes out of the hut. Therefore, the objective of health managers involved in community health programmes should be to enhance underprivileged communities' capacities to effectively adopt such measures. This raises the question of a health manager's objectives and strategies.

#### **2.4.3 Health objectives and educational strategies**

Recourse to participatory approaches does not absolve a health care manager of setting health and educational objectives. General health objectives can be expressed as the upgrading of the health status of a population, or as reductions in morbidity or mortality. More specific objectives should be expressed as well. If, as in the case of the subject of this essay, these objectives should be met by mobilizing communities and encouraging behavioural change, then health education will inevitably be part of the strategies. Therefore, the health objectives should be translated into educational objectives (WHO, 1988), expressed in terms of specific knowledge or skills participants should acquire. Describing ideal behaviour, these educational objectives are, from a scientific point of view, optimal behaviour leading to the desired health outcome. But during their interaction with the target group, health educators may well settle for behaviour that the target group finds acceptable and believes is capable of doing. *feasible* behaviour. This would constitute the most realistic behavioural goal that the intervention is expected to promote (A tool box for building health

communications capacity, 1996). Therefore, the educational objectives should be seen as guidelines for intervention.

A programme aiming at increasing caretakers' control over determinants in their immediate environment that cause ARI in children aged less than five, and lead to late referral of serious cases to a trained health worker, should have following health and educational objectives:

*1. Health objectives:*

- A) Morbidity due to ARI is reduced
- B) Mortality due to pneumonia is reduced
- C) Caretakers' capacity to prevent cases of ARI is enhanced
- D) Caretakers' capacity to treat cases of ARI is enhanced

*2. Educational objectives:*

- A) Caretakers master correct hygiene and feeding practices (UNICEF, 1993):
  - a) Mothers give breastfeeding (or mother's milk) until about six months
  - b) Caretakers give their children a balanced diet
  - c) Caretakers give their children a diet rich in vitamin A
  - d) Caretakers allow children who do not breastfeed to sleep alone
  - e) Caretakers do not smoke or make fire indoors
  - f) Caretakers wash their children's hands and face regularly
  - g) Caretakers do not allow contact between people with colds and coughs and their babies
  - h) Caretakers bring their children for immunizations

**B) Caretakers master correct health care practices (UNICEF, 1993):**

- a) Caretakers recognize the symptoms of ARI in their children
- b) Caretakers continue to feed their sick child
- c) Caretakers continue to give fluids to their sick child
- d) Caretakers keep their sick child warm (but not hot)
- e) Caretakers help their sick child to breath (clearing the nose)
- f) Caretakers aerate the room where their sick child sleeps
- g) Caretakers do not allow that other people spit or sneeze close to their sick child
- h) Caretakers recognize the early danger signs of pneumonia
- i) Caretakers bring their child that shows the early danger signs of pneumonia on time to a trained health worker

**(C) Caretakers master life supporting skills**

These educational objectives will depend on the actual skills that the target group masters and its specific learning targets. They may relate to attempts to diversify a community's diet and aim at boosting its capacity to grow vegetables or fruits (as in cattle herding societies), or to attempts to give access to clean water, entailing the need to construct and maintain water wells, or filters, etc.). Literacy, and resource linking are other examples of life supporting skills that communities may need to develop.

It is obvious that some types of behaviour that cause ARI, like bad hygiene, also cause other problematic diseases. Diarrhoea is a case in point. Therefore, in any real life situation it will be very difficult (and not desirable) to separate discussions and

actions about ARI from those about other diseases. This would also go against the integrated approach of Primary Health Care. If in this essay I focus on ARI, it is for illustrative reasons only. The actual focus should be broader.

#### **2.4.4 The PAR cycle for ARI: Concern**

A warning is warranted before setting off on a review of the PAR process. The systematic discussion of its different phases may suggest that these phases are separate entities. This is not the case. In practice, all phases are tightly entangled with each other, and if I separate them, it is only to better describe the dynamics of the PAR process.

##### **A) The initiative**

Health programme managers' perceptions of the health status of a community or a population is likely to be influenced by morbidity and mortality figures emanating from the health services they supervise. These figures may indicate a persistently high incidence of a certain disease or condition, e.g. ARI, leading to an unacceptable degree of mortality. The health manager's observations are a cause of concern since they indicate that there may be a serious problem affecting the health status of a certain group within a population. They may not be able to define the problem yet, but some speculation as to the elements that constitute the problem is warranted. These may be practices of hygiene, knowledge of signs of ARI, timely consultation of a health worker, etc.

Such a concern should be tested by a sort of fact-finding exercise. One way is to ask people who, because of their work or position, can be expected to have an opinion on the issue. Informal conversations with health workers, health authorities, mothers presenting children, or influential members of the community (e.g. teachers, traditional and religious leaders) can generate information on views in the community and indicate whether this issue is indeed a matter of concern for a substantial part of them, and whether it ranks high on their list of priorities. Stringer (1996) stresses that outsiders exploring the extent of what is possibly a problem should act unpretentiously. They should inform people of their concern and intentions and suggest they can contribute to a clarification of the issues. Outsiders should also assume a neutral stance and avoid trespassing certain boundaries of “territories”, the privileged domain or function of people in the community.

#### B) The stakeholders

Once the health programme managers obtain an indication of the relevance of the problem issue, they should start establishing who are the major stakeholders affected by the problem, and who could potentially be involved in the design and implementation of a programme aimed at tackling it. Two major groups of stakeholders can be discerned: all groups who have an interest because of their mandate or function (e.g. health authorities, teachers...), and all groups whose lives are directly affected by the problem: the caretakers of the children and, although to a lesser extent, the health workers in the facilities. Inventories of stakeholders can be made. Stringer (1996) suggests “social mapping”: charting of the social dimensions of a setting. This would include a list of all the stakeholders with mention of income,

education, access to health services, to clean water, or whatever other variables that are deemed relevant. For the health manager it is useful to try to view the problem from the perspective of each of these groups. How important is the problem for each of them? To which extent are they affected? Which causes do they give? Whose situation will be improved and who threatens to lose if action is being undertaken? As is already indicated by Stringer's warning that any preliminary investigation of the facilitator into the extent of the problem should respect the domain of people with vested interests, even the investigation into a problem of health concern has a political concomitant. Hart & Bond (1995) suggest to map the spheres of influence of potential allies, opponents, or people who can be deemed neutral. People may share your view and have a lot of influence, or hardly any influence at all. People may oppose your views, but lack influence. It is also important to know who are the key people in the informal patterns of influence.

### (C) The facilitator's preliminary picture of the situation

At this stage, the facilitator, using information obtained in personal meetings with people of all stocks, from documents or from observation, should be able to build a preliminary picture of the problem (Stringer, 1996). It should contain health related information, like morbidity and mortality figures, status of existing health services, a general understanding of the circumstances that can lead to ARI in children (e.g. hygienic practices), as well as the stakeholders most affected by the problem or involved in the issue. Other important information is income (economic power), degree of education (literacy), the degree of concern of other stakeholders, ethnic groups (according to religion, language...), social stratification, important events that



happened in the past and that may affect people's willingness to cooperate with each other. Most important, the preliminary picture should give an indication of the importance the different groups accord to the problem issue, and their willingness to put an effort in solving it.

#### D) The first meetings with the participants

If the facilitators feel that there is enough common ground amongst the different stakeholders, and potential support for a project around ARI, they can request them to join in a project. The principles and methods of PAR should be explained to all the representatives of the groups (especially to the key people in the groups), just as it should be stressed that participation is unconditional and voluntary. The first group to be won is the one of the authorities (both traditional and modern). They should understand and want the project. Without their (at least passive) support the project will fail. Eliciting their support is more than a pragmatic measure, it is an acknowledgement of their legitimate rights as authorities to sanction the project and participate in it.

At this point I would like to make a comment with regard to the participant groups of stakeholders in ARI oriented PAR process. One can discern a sort of task division between three groups with regard to ARI prevention and care of children: mothers, trained health workers, and traditional practitioners. While mothers should know the symptoms of ARI in their children, and recognize the danger signs of pneumonia, the trained health workers should diagnose the children presented to them and decide whether to advise home treatment or refer to a hospital. In the case of home

treatment they should be able to give instructions in a for the mothers clearly understandable way. For this, they need to understand the mother's perceptions of the signs. and use the same terminology as they use. As what traditional healers is concerned, they may quite well be confronted with children who suffer of pneumonia (which they can not treat with traditional methods). Therefore they should be trained to recognize the danger signs of pneumonia as well, and refer to a trained health worker (McNee et al., 1995). This implies that it may be desirable for the three groups of stakeholders to meet at one point in the PAR process and continue a joint learning process. Stringer (1996) advocates that each group representing stakeholders should first discuss the issues amongst themselves, in order to define what he calls descriptive and interpretive accounts of the situation at hand. A descriptive account can be seen as a survey with inventory of the problem situation, in many respects similar to the facilitator's preliminary picture, while an interpretive account aims at helping people gaining an understanding of their own experiences in terms that make sense to them. Only when each participating group is satisfied with their interpretive account can the accounts of all the participating groups be joined in order to start work at one problem statement about which consensus can be reached. However, in the context of this essay I would like to focus on one group only: the caretakers, who will usually be the mothers.

The mothers can be reached through the authorities (both modern and traditional). Appointments can be made for an initial meeting to which all women up from 15 are invited. The venue should not be an uncommon place, or be otherwise threatening. The main purpose of the meeting is a presentation of the global problem

issue as seen by the facilitator. The PAR procedure is introduced and proposed as a tool to investigate the problem issue. A request is made to whoever is interested to cooperate. Discussions may break out and ARI will most likely be challenged as the only major cause of concern. I would consider that a promising start, since it would give an indication of the group's participation in the discussion about the problem identification, which, as I stressed earlier, is of utmost importance in the process of gaining a sense of ownership of the project. Rudd & Comings (1994) advocate the incorporation in the problem definition of issues deemed more pertinent by the participants than the issue predefined by outsiders- even if not related to health. They argue that this will express the reality of the participants and suggest that it may offer a vehicle for the discussion of the health problem raised by the outsider. The authors draw examples from projects in which a participatory approach is used to produce learning materials ( in casu photonovella), which is a slightly different context than in the case discussed in this essay, but I believe that the principle holds: omitting issues that are pertinent to the participants goes at the risk of weakening the participants' interest in the project. Rudd & Comings rightly use the word "negotiate" to characterize this stage of the process.

The introduction of PAR as an instrument to proceed, may mean for most, if not all participants, a step in the unknown, and could easily lead to feelings of uneasiness amongst the potential participants. Making the participants feel comfortable is one of the main tasks of the facilitator. This is more than developing a relaxed atmosphere in which the participants feel free to speak openly on an equal basis with the others, and in which they have the sense of being able to contribute on the basis of

their own ideas and experience. It also means clearly establishing the group's aims and objectives, and developing some practical rules about membership, proceedings, responsibilities, etc. (Ewles & Simnett, 1996). Last, but not least, it should be stressed that the whole process will start with what the participants know and what they can do. This will foster their self-confidence. It is truly the period in which trust is being built between the participants and the facilitator.

#### **2.4.5 The PAR cycle for ARI: Problem identification and information gathering**

While the facilitator has a clear picture in mind of the educational objectives that should be reached, as well as of possible behaviour that could lead to the attainment of these objectives, the process of problem identification should start with what the group of caretakers know. Some culturally adapted method may be used to encourage the women to express their knowledge and ideas related to ARI. For example, in some rural areas of Africa it is not uncommon to see “troubadours”, who entertain an audience under a tree with songlike recitations, often about historic figures or events. So, similar recitative accounts of “troubadours”, or storytellers, could be used to evoke a situation in which a mother discovers some signs of disease in her child, and seeks treatment for it. Such a story would constitute a Freirian “code” in the real meaning of the word: a concrete physical representation of an identified community issue (Wallerstein & Bernstein, 1988). If well told it would illustrate some of the common problems mothers face when they seek treatment for their child, and which the audience will recognize easily. After the story, the facilitators (or the storytellers themselves?) can use the problem-posing method, with its two central elements -- dialogue and raising the “why” question -- to engage in a process of

communication about what the mothers have seen. What happened in the story? What are the problems? Can we tell similar experiences from our own lives? Why do these problems exist? (Minkler & Cox, 1980; Wallerstein & Bernstein, 1988).

Interaction between facilitators and participants, as well as the latter's active contribution can be fuelled by a multitude of techniques, according to the objective of the day, or the circumstances of the moment. In some instances it may be more appropriate to resort to smaller groups than to a larger forum discussion, like when the participants exchange their experiences with past sickness episodes in their own children. Role-play, songs and dances, question-and-answer sessions, even formal instruction techniques by the facilitators, can be considered.

Questions will give raise to answers, which will give raise to more questions. Participants may find a need to gather information on a certain topic (e.g. did our mothers and grandmothers use methods to treat a cough in a child that we are not aware of any more?) and will have to decide how to obtain it (e.g. by asking the elderly, or traditional or modern health practitioners). The need to obtain information may itself evoke the issue of learning some skills (e.g. organizing a group to divide tasks).

Such a process may be extended over a longer period. Sessions should not be too long to avoid that they interfere with the daily tasks of the women, or become boring. The participants may use some of their time in between sessions to look for information, or carry out a preparatory task for the next session. Eventually, this

problem-posing process should lead to the participants acquiring an insight in the causes of certain health problems, and the reasons for their own health related behaviour (WHO, 1988).

Health education is one of the central themes in this process. If participants are likely to learn by themselves, at some stages they may also give an indication that they need some formal instruction. This is where the facilitators can step in and even put some issues on the agenda (watching their list of health and educational objectives, as discussed in section 2.4.2). Given the participants' invitation to teach they will be open for the health messages the facilitators give. However, the health messages should be embedded in a context that enables people to understand them, that is, facilitators should care for the cultural sensitivity of their messages. A good starting point is the realization that people act rationally, even if what they do may be considered irrational from a bio-medical point of view. Iyun & Tomson (1996) explain how in Nigeria some mothers use modern drugs based on their understanding of the causes of pneumonia and the effect that this drug will have on these causes. From such an angle, cultural sensitivity means due consideration for the inherent rational behaviour of people. One should avoid attempts at eradicating unhealthy behaviour (from a bio-medical point of view), and teaching a scientifically sound alternative, but rather explore the extent to which traditional health beliefs and practices (believed to be exponents of rational thought) can be used as a conceptual basis for the production of new ideas (Stone, 1986). This may be illustrated by an example from McNee et al. (1995). *Piang* is the name the people of Bohol in the Philippines use for a certain type of cough, for which a traditional healer is being consulted. Health messages aimed at inducing caretakers to

bring their child with symptoms of fast breathing to a trained health worker can use this term to indicate needs of referral based on degrees of severity. *Piang* with cold feet and a hot head could be treated by a traditional healer, whereas *piang* with fast breathing would require referral by the traditional healer to a midwife or doctor. Here, fast breathing would be presented as a complication of *piang*. Thus the health message (fast breathing as a danger sign) would be integrated in the existing perception of the disease (a case of *piang*), and local terms and categories of severe ARI would be used.

If facilitators want to integrate their health messages into existing perceptions of disease and treatment, they need intense interaction with the participants, and I think that a PAR project is a good setting for such a method. Ideally, the participants give facilitators an indication of how to construct the most appropriate health messages.

Eventually, this phase of the PAR process should result in a sort of inventory of topics, such as different types of ARI as perceived by the community (and their local names), causes of the diseases, a classification of their seriousness, methods of treatment, problems in seeking treatment, people involved etc. (Stringer's descriptive account). Amongst the problems that would most likely be mentioned by many participant groups in different settings in developing countries are: indoor cooking on wood fires, indoor smoking, lack of (clean) water, long walking distances to health facilities, lack of drugs in health facilities, malnutrition due to lack of food or unbalanced diet, scarcity of vegetables and fruits, omnipresence of flies, children sleeping close to each other, lack of blankets in the cold season, a dusty ambience at the beginning of the warm season... Facilitators should not be satisfied with such a list

of problems only (which can too easily be turned into a shopping list presented to an external financing agency). It is crucial that the participants are able to see themselves in this web of problems. How are they affected by these problems? Which elements in their behavioural pattern determine these problems? Why do they behave like this? What WHO (1988) describes as one of the functions of health education, namely “helping people to see the reasons for their actions and health problems” is one of the cornerstones of each PAR project (corresponding with Stringer’s interpretive account).

#### **2.4.6 The PAR cycle for ARI: investigating alternative solutions, planning for action**

The facilitators will easily recognize some or most of the health problems that made part of their preliminary picture. Most likely will other problems have been identified as well, probably related to traditional health practices and political or economic relationships between people or groups of people (based on knowledge to which external persons do not have easy access). In this phase the participants will also be able to give an indication of the importance of each problem, or its impact on the children’s health. This could possibly be done in the form of a problem tree, which is a component of the ZOPP method (World Bank participation sourcebook, 1996). The scarcity of health facilities is likely to rank high on a list of problems. The participants may also reach consensus on the difficulty with which women recognize the danger signs of pneumonia (especially fast breathing) as a major problem.

The planning process gets a boost when the different problems are being turned into goals (another step in the ZOPP method). If the nearest health facility is located at



a big distance from the village, the participants could set the creation of a clinic in their village as a major goal. The problem of difficult recognition of the danger signs of pneumonia could be turned in the goal of enhancing mothers' ability to discern the danger signs of pneumonia in their children.

Guided by their estimate of the gravity of each problem, they will be able to indicate which goals are a priority over other goals. The lack of health care services may be a source of deep concern for many people, and I can guess that the creation of a health centre in an easy walking distance of the village would be a high priority. But when the participants consider what they can actually do - when they decide which strategy would be a suitable one - they will soon realize that their leverage is rather limited. For villagers the creation of a health centre is not an easily achievable goal. Therefore, the participants may reconsider the issue and modify the goal. Then the goal would become: increase access to health services by training someone locally to perform a basic set of tasks; or improve transport (e.g., upgrade a road, or make a deal with owners of vehicles); or lobby for outreach services from the nearest health centre... These goals, set with a picture of the local situation and means of the participants in mind, would become achievable goals. The participants may also consider that the goal that mothers, after some training, do recognize the danger signs of pneumonia, is an achievable one. Setting achievable goals is the result of a sort of second exercise of prioritization in which the severity of the identified needs are being weighed against the accessibility of resources, or to put it into other terms: of what can be done now, and what should be tackled in the future (Nickson, 1993).

#### **2.4.7 The PAR cycle for ARI: action**

While setting achievable goals the discussion will for sure turn around resources, as well as skills and knowledge that are needed to gain access to these resources. At this point it will become clear that the learning process of the participants has not ended. Many more skills should be acquired, and increasingly of a different nature. They will not only be related to health issues, but also to economic issues (e.g., how to access material resources), or to communication with other stakeholders (e.g., how to advocate one's own cause). This stage stresses the relevance of one of the basic notions of PAR: that action and learning are deeply intertwined with each other, to the point of being a condition of each other's existence. This can be illustrated with the example of the goal of mothers being able to recognize the most important danger sign of pneumonia (fast breathing):

Goal: Mothers recognize fast breathing in their children.

Strategy: Give training to the mothers

Resources needed: Trainers, a place to give training, teaching materials, food, children, etc.

Setting the goal of training will open a Pandora's box of problems that need solutions, but also offer opportunities for personal and group development. First of all, the idea of training should be sold to those who can help. In this case the authorities and health workers. This implies the need to learn some communication skills: influential people should be convinced of the need to do something and to assist. Trainers may need food, possibly some incentives. The participants should organize the collection of the food and the distribution of the work. This may entail the need of

some sort of book keeping, registration of the tasks and turns of the participants, etc... In other words, some basic organizational and administrative skills should be acquired. In some communities may the training sessions reveal that decimal counting is not widespread amongst the learners, and that acquiring some basic arithmetic skills may be a necessary condition to help mothers count their child's breathing rate. Gradually the participants themselves may become involved in the training activities as well and help thinking of appropriate teaching methods and learning materials (Rudd & Comings, 1994).

When touching upon the issue of learning materials I would like to make a small sidetrack. I would highly encourage participants' involvement in developing learning materials (or even their autonomously developing them). It may serve more than one function. In the first place, it may constitute an important thinking exercise, in which the participants are invited to review the issues discussed in earlier health education sessions, but then in a more pro-active role. The purpose of making teaching materials would add to the need of being critical of the health education messages at hand, and this would reinforce the learning process. In the second place, making learning materials allows for reaching more people of the same target group. As Rudd & Comings (1994) point out, members of the same target group may be willing to accept more readily the health message if they know that the learning materials have been made by their peers (next to the fact that the situation represented may be more recognizable).

Whatever goals and strategies are chosen, if pursued seriously they will spark off a chain reaction of communications with other people, organizational activities, educational and training activities, income generating activities, etc. which is nothing else than the empowerment process described earlier in this essay. At the same time this process should bring the participants closer to a solution of the problems they have identified and prioritized earlier.

#### **2.4.8 The PAR cycle for ARI: reflection, evaluation, re-definition of the problem, new action**

Sooner or later there will be a need to monitor the progress of the activities. The participants will want to see results. And indeed, results are an important motivating factor. As Purdey et al. (1994) stress, a programme will falter if the empowerment process fails to produce tangible results.

After engaging into a certain course the participants may want to know if they have made some way towards their goal. They will need indicators of progress, and instruments to measure their process, especially if the results, important as they may be, are not palpable, or if their endeavours do not bear immediately fruits, as is often the case with health education. Facilitators play a crucial role in helping the participants assess their progress. They may decide to provide the participants with the tools to measure progress. The Thai government's "Basic Minimum Needs and indicators" (Nondasuta, 1988) are an example of the massive introduction of indicators of well-being to be used by communities for setting local targets and assessing progress. UNICEF (1998) has been promoting child weighing as an instrument to

enable communities to keep track of the growth of their children in nutrition programmes. Communities who weigh their own children on a regular basis and keep records, obtain data they can compare with previous data and possibly with similar data from neighbouring areas. The value of UNICEF's approach lies in its encouragement of analysis and further action. So, child weighing communities may notice differences between groups of children, or similarities, and they may wonder what are the causes or reasons, and engage in further analysis. Such a period of reflection may result in amendments to the course of action that was agreed upon previously. Further weighing exercises should give an indication of the appropriateness of the amended strategy.

The ideal, of course, is that the communities themselves decide how they will monitor the progress of their activities and determine their own indicators. They can easily come up with indicators such as the number of participants who implement certain measures of hygiene decided upon by the group during their sessions (e.g. stop cooking indoors), or the number of women participating in training sessions to learn how to discern fast breathing, or the number of women who pass a test for a certain skill, etc.

When smaller goals are achieved (the ones the women can reach more easily because they have more easy access to resources), other goals should be tackled. This will lead to involvement of other groups in the PAR process. As I stated before, cooperation with modern and traditional health workers is indispensable to combat pneumonia. These three groups should understand each other and cooperate in solving

what is a common problem. Ideally, the traditional and modern health practitioners should go through a similar process as described above. At one stage representatives of the three groups should meet to work at what Stringer (1996) calls a joint interpretive account.

#### **2.4.9 Will PAR work?**

A PAR project may not work for many reasons. Amongst them are: facilitators fail to establish a network of allies, ignore influential or key members in the community, ignore vested interests, do not involve health staff, allow authorities to impose their views, do not make clear agreements with the participants at the onset of the project, ignore other problem issues deemed important by the target group. Other reasons may be: cultural values and traditions within the community are incompatible with the spirit of PAR; interpersonal problems amongst the participants; and a heterogeneous group composition.

Before starting the project, the facilitators should identify all the groups within the community who have a potential interest in the project (the stakeholders), either because they are directly affected by the problem issue, or because they should be consulted in view of their positions. The outsiders should know how much power each stakeholder has over resources, or how strongly they want the programme to go ahead and possibly cooperate with, or rather disrupt it. They should also define their relationship with each stakeholder, in terms of obligations, or of being able to act independently of them. For the outsiders/facilitators it is important to make allies who not only share their views, but also have influence and give support (Hart & Bond,

1995). Failing to establish a network of allies and supporters may limit a project's viability. Also, ignoring some influential members of the target group may result in no, or a weak participation of the target group.

Entering a community is entering a field with established social and political relations, and outsiders' interventions may unwittingly hurt the interests of some people or groups (what Stringer (1996) calls "people's domain"). Not recognizing such domains of vested interests may result in acquiring silent enemies and jeopardize the implementation of the project.

Staff of health facilities have a strong vested interest in any health-related PAR project that will be set up, since the activities are most likely to be carried out in the catchment area of their health services. Therefore, they should preferably be involved. Their technical expertise, and possibly familiarity with the target group, make them natural partners in the health education sessions. Ignoring them is not only tantamount to wasting precious human resources. It may also lead to their feeling excluded, and to some passive resistance against the project. Furthermore, I believe that involving health staff in the PAR activities may help to bring them closer to the communities they serve.

The authorities are amongst the first who outsider facilitators will have to meet. They have a legitimate right to be informed and consulted, and to give their consent. Facilitators cannot avoid this starting point, unless they take the risk to alienate the authorities and have them boycott the project. In fact, the start of a PAR project will

often depend on the good-will of those in power - in extreme cases they may veto the project (Schoepf, 1993).

A potential risk of passing through the authorities, is that they may impose their views on the problem issue, the implementation of the project, or even indicate who should participate. If they succeed in imposing their views, the participants may be alienated. The participants may not trust the programme, or the problem issue, modified by the authorities, may not match their priorities, in which cases they may not support the project. Therefore, the facilitators should keep the balance between requirements imposed by the authorities and their views about the needs of the programme.

As soon as the facilitators have taken the hurdle of the authorities, they face a second one, which I think, is even more crucial: they have to make contact with representatives of the target group to propose the set up of a project. This is a most delicate phase of the programme, because the representatives of the target group may be suspicious of the outsiders' intentions. The target group may wonder what are the real intentions of the facilitators, or who has requested them to start this project, and for which reasons. Even if they do not anticipate negative consequences for their group, they may be wondering whether they have an interest at all in the proposed project, especially if the facilitators come up with a problem issue that may not be felt as a high priority by the target group<sup>14</sup>. These issues should be cleared before the project starts. Failing to do so is likely to result in an unmotivated and uncooperative



target group, or it may lead to unjustified expectations, that since they will remain unfulfilled, will eventually demotivate the group. Therefore, the facilitators should be cautious to agree well before the start of the project with representatives of the target group about what the objectives will be, which proceedings to follow, and who will benefit from the results (Hart & Bond, 1995).

Should the target group recognize the relevance of the health issue brought up by the outsiders, but insist they have more pressing needs not related to health, then it is important that these needs are incorporated in the project (Rudd & Comings, 1994). I agree with Stone (1986) that in developing countries – she gives the example of Nepal -- health is not necessarily the most effective stimulant of a participatory process. However, it should be possible to relate health and non-health issues to one another – for example, in terms of poverty – and this would reconcile the perspective of health professionals with others.

Cultural values and traditions may affect the implementation of a PAR project. A community's cultural background may leave it ill prepared to engage into a PAR project. Stone (1992), speaking from her experience in Nepal, even suggests that applying the concept of participation to development projects, may be tantamount to promoting Western cultural values of equality and self-reliance amongst communities, who do not share these values. PAR requires a cultural setting in which people feel free to express their opinions, or even criticize others (Maclure & Bassey, 1991). If this is

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“ In theory, the initial phase in which facilitators explore the problem issue, should give a strong indication of whether it is also a high priority issue for the target group.

not the case, then the facilitators will have to do some preparatory work, lest the project fails for lack of participants' self-confidence or input.

In order to work successfully in a project, a group should have some degree of "collective competence", a group's ability to collaborate and achieve consensus at all stages of the project, including identification of problems and needs, determination of priorities and goals, description of strategies, and effective cooperation in action (Harper Howze & Redman, 1992; Purdey et al., 1994). The collective competence of a group may be affected by interpersonal issues (as diverse as personal sympathies, antipathies, or even attempts at manipulation). As Oja & Smulyan (1989) suggest, collaboration on a PAR project is a dynamic process, in which interpersonal developments may interfere with task issues. The process may go through different – not necessarily distinct – phases in which either interpersonal or task issues are central. (Often there is a "conflict phase" in which some participants express resistance to other participants' tendency to assume dominating roles, or in which even the facilitator's functioning may be challenged. If a group is not able to solve these interpersonal issues, then it will not be able to proceed with the task issues of the project.

Reaching collective competence may be especially difficult if the composition of the group is quite heterogeneous. Members of heterogeneous groups may not share perceptions and interests, or their sense of sharing may be limited to one particular issue or threat, but not to other issues. As a consequence, working with a group on one particular issue may be well possible, but rather difficult on another issue (Jewkes & Murcott, 1996). A project that moves quite well ahead when an issue thought

important by most participants is being dealt with, may stagger when it enters another phase, deemed less important by the group. This may be in particular the case for a group with members with a potentially very diverse background, such as mothers of children under five years old.

## **2.5 Conclusion**

In this essay I have discussed the problem that caretakers of children under five years old, often do not recognize the danger signs of pneumonia in their children, or do not have the means to present them on time to a trained health worker. I have defended the position that some factors that cause pneumonia, or that prevent caretakers' correct responses, are located in the immediate environment of the communities and can be acted upon by them. Caretakers can identify and act upon these factors by learning about causes that lead to pneumonia, and develop skills that help them to solve problems that put obstacles in the way to correct health care seeking. The strategy proposed in this essay is to encourage communities to empower themselves, so that they are able to act upon the factors in their environment that cause ARI or prevent correct treatment. The methodology I proposed is Participatory Action Research (PAR), that enables communities of caretakers to link learning about causes of ARI and correct preventive and treatment measures, with training in life supporting skills. I have described a hypothetical situation in which a PAR project could be set up, going through the different phases, while explaining the approach, procedures and requirements to implement such a project.

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