Unit-7
Participatory Research in Occupational Health

Units of Certificate in Occupational Health and Safety

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Unit Contents

Unit-7: Participatory Research in Occupational Health

7.1 Learning Objectives

After completing this Unit, you should be familiar with the following concepts and issues.

- What is participatory research?
- What does participatory research in occupational health mean?
- The various steps in the participatory research process.
- The role of safety circles, safety incentives and diagnostic camps.

7.2 Introduction

An effective occupational health and safety (OHS) programme needs the worker's commitment and participation. It has been felt that when safety policies are developed, they should be done in consultation with the workers as well as the management. Moreover, all the employees need to be involved in an organisation's efforts to prevent accidents and occupational diseases. This is especially important in small organisations, where there may not be the same access to professional health and safety expertise as there is in many large organisations.

Workers must be familiar with the safety programmes, be awarene about their rights and responsibilities and understand how to handle concerns. Workers' input and commitment to the health and safety programmes can be gained in part through an effective occupational health committee, by undertaking consultations directly between the employer and workers, encouraging the workers to report their concerns and then dealing with those concerns promptly. In addition to this, the workers' commitment could also be increased by encouraging them to suggest how health and safety issues within the organisation could be improved. Based on the suggestions put forth by the workers, it should be the organisation's responsibility to protect workers from reprisals for raising concerns or making suggestions. Organisations should also respond promptly to the concerns and suggestions that have been raised.

This Unit explains how the concept of participatory research (PR) can be used as a tool in managing OHS issues within the organisations. It is about considering the inputs received from both workers and the management. Participatory research as a methodology is the core methodology that has guided all the key interventions within PRIA. A number of insights cited in this Unit are based on PRIA's first hand or field based experiences.

7.3 Philosophy of Participatory Research

Roots

Knowledge is increasingly becoming a major source of power and control. The exercise of power through control over knowledge has been consolidated, among others, through social science research methodology, which became the dominant research paradigm after World War II. The second half of the 20th century witnessed a rise in various disciplines of Social Sciences and their utilisation in the State's development policies. Much of the research conducted to evolve new insights and theories remained the domain of professionals, experts and their institutions. The knowledge, thus produced and distributed, largely supported the status quo of

different societies on one hand, and on the other hand systematically deprived ordinary people from participating in the process of knowledge production and distribution.

Participatory research has been actively rooted in the history of people's struggle for survival and growth. As a concept however, it evolved as a critique for the dominant system of knowledge production, as perpetuated by the social science research methodology. It represented an alternative system of knowledge production. Participatory research challenged the premise on which traditional social science research methodology was based; the premise of neutrality, objectivity and value free character. Participatory research attempted to present people as researchers themselves, in pursuit of answers to the questions of their daily struggle and survival.

Participatory Research

Drawing its strength from Paulo Friere's work on conscientisation and the practice of adult education, among others, PR legitimises popular knowledge and reinforces the notion that the poor could be involved in the production and use of knowledge, in order to understand their own reality and to change it for enhancing the quality of their life. Building on the premise of knowledge is power, this approach assists the poor in critically investigating their reality, critically analysing it and then undertaking collective action to bring about constructive change in their lives.

It refers to the efforts made in several spheres to develop research approaches, which involve those persons who are the expected 'beneficiaries' of the research. Some of the guidelines that have emerged from these efforts to date are:

1. A research project – both process and results – can be of immediate and direct benefit to a community (as opposed to serving merely as the basis of an academic paper or obscure policy analysis).

2. A research process should involve the community in the entire research project, from the formulation of the problem and the interpretation of the findings to planning corrective action based upon them.

3. The research process should be seen as part of a total educational experience which serves to determine community needs, and to increase the awareness about problems and commitment to solutions within the community.

4. Research should be viewed as a dialectic process, a dialogue over time, and not as a static picture of reality at one point of time.

5. The object of research, like the object of education, should be the liberation of human creative potential and the mobilisation of human resources for the solution of social problems.

Research has ideological implications. Research that allows for popular involvement and increased capacities of analysis will also make conflictual action possible, or necessary. It may,

for example, be necessary at a certain time for the researcher to choose to side with one group or another within the community.

Characteristics of Participatory Research

The concept, approach and methodology of PR has several characteristics:

1. Participatory research is a process of knowing and acting. People engaged in PR simultaneously enhance their understanding and knowledge of a particular situation as well as take action to change it to their benefit. Participatory research thus attempts to remove the established dichotomy of knowing and using that knowledge. Knowledge is linked to a concrete action. This enhances the quality of knowledge as well as informs the basis for action.

2. The process of PR is initiated in the context of the actual reality, which the have-nots intend to change. Therefore, an existing problem provides the initial motivation for engaging in PR. In situations where people are already aware of a problem and articulate enough about it, they may initiate PR themselves. They may or may not use the resources of experts from outside. In other situations, some outsiders, be they activists or educators or researchers, may provide the initial problem focus. However, the involvement of people from that situation in the process, even if it begins with an external push, is a necessary element of PR.

3. While the participation of people in processes of knowing and acting is a necessary part of PR, the extent and nature of this participation varies. Where the initiative to engage in a PR process comes from the people in the situation, their participation is quite widespread. In most such cases, they take part in the methodology of data collection, analysis of data, planning and taking action. In other cases, where the initiative comes externally, the participation of people from the situation is initially limited, but tends to increase in scope and depth as the process moves on. They may not be so involved in methods of data collection and analysis as they may be in the planning and taking action stage.

4. The people in the situation must have control over the process of knowing and acting. It is easier to obtain control when the initiative comes from the people themselves. In the case of an external initiative, it is a slow process by which people of and in the situation begin to control the PR. The external party may not relinquish control so easily. Experts have a tendency to control others and ordinary people tend to voluntarily submit to an expert's control. In either event, it is imperative that the processes of PR shift control over the process of knowing and knowledge to the people in that situation.

5. The methodology of PR attempts to reduce or eliminate the limitations of classical research. It employs methods of data collection which are prevalent in classical research. However, it also emphasises qualitative and phenomenological methods, which are generally considered 'unscientific' in the classical model. The methodology of PR, however, stresses inter-personal communication among different parties and demands clarification of the the external party's motives, if any.

6. An important characteristic of PR is its 'collective' nature. The process of PR requires groups of people to engage together. The most important step in this context is the collective analysis of a given situation. It is this significant distinction from the classical paradigm that makes research an individual effort.

7. An outcome of this characteristic of PR has been the creation of organisations among the have-nots. The process of PR brings the have-nots together; collective sharing, analysis and action generate strong connections between them. Over a period of time, these connections grow into organisations of the have-nots. This has been demonstrated many times in the rural Asian context.

8. The process of PR is an educative experience for those engaged in it. The people in the situation become aware and more knowledgeable through their engagement. They become more knowledgeable about methods of understanding any analysis; they become aware of their situation and possible ways of changing that situation. It is this component of learning-for-all that makes PR a distinct approach.

Participatory research has made valuable contributions in Asia and throughout the world. It has been used to bring about improvements in villages, urban slums, tribal habitats, etc. It has been effectively engaged in adult literacy, primary health care, agricultural practice, and economic enterprise. It has been brought in from outside as a tool for local confrontation and has contributed to people's organisation, conscientisation and liberation.

THINKTANK

- What do you understand by participatory research?
- Describe some factors that have shaped the development of participatory research?
- What are the main tenets of participatory action research?

7.4 Use of Participatory Research Methods in Occupational Health

Almost all occupational health (OH) research studies are focused on human beings; the workers. Their health and their wellbeing is the subject under investigation. The primary tool for investigation is the recording of occupational history and the symptoms of the worker and relate them to the exposures at the workplace. Once this is done, the adverse symptoms are verified with diagnostic machines, sampling at the workplace and the researcher or expert's theoretical information. The first component of research, in other words, serves to diagnose the ailment while the second component serves to establish the link between suffering and exposure to occupational hazards. In both instances, the worker is the "object" of investigation. They are primarily used as the 'samples' rather than as participants in the creation of knowledge. Control over the research process is entirely in the hands of the researchers or doctors, technicians, scientists, etc. These experts are respected and sometimes feared. Most of the time, the fear of experts is reflected in distancing workers from their own sufferings.

This dichotomy between experts and workers is also evident in the outcomes of research in OH. Research is often undertaken for purposes of academic curiosity rather than for improving the lives of those affected by OH hazards. The results of research studies are generally used for the benefit of the researchers or the resource providers. Moreover, the results rarely reach the affected workers.

In recent years, research in OH, as in other technical disciplines, has met with considerable criticism. Researchers are finding it exceedingly difficult to confine research to laboratories, as results demonstrated in a laboratory are frequently disproved in real-life situations. Some argue for 'openness' on the part of the experts, not only in the process of investigation, but also in sharing the findings with the affected workers. Others encourage the use of social science research techniques in order to make the subject more relevant to human beings. It is argued that an understanding of OH also involves understanding the relationships between workers, employers and production techniques. This holistic perspective is sometimes missed by the purely scientific exercise. Therefore, many PR techniques nowadays are adopted by the purely scientific and clinical studies.

The next Section describes a variety of interventions through which the inadequacies in conventional OH research can be addressed.

7.4.1 Role of Participatory Research in Occupational Health

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Masks are worn to prevent dust, fumes and toxic gases from entering the human airways. From the employer's point of view, masks serve as a reasonably cheap way to ensure occupational safety. Organisations are of the opinion that if wearing a mask is uncomfortable, then it is the worker's problem and not the employers. If any health problems occur then the survivors are to be blamed for not wearing masks when needed.

The workers on the other hand perceive this issue differently. In their opinion, wearing masks for extended periods of time, particularly in hot and humid weather conditions, is quite uncomfortable. Masks also limit communication between workers. Furthermore, there have been cases where masks have failed to prevent occupational hazards. Large-sized dust particles can block the pores of a mask and so prohibit the passage of air. This can suffocate the person who uses it. Alternatively, fine dust particles may pass through the pores of the mask and reach the nose and nasal passages of the user. Fine dust is amongst the worst occupational health hazards, as it enters the lungs with disastrous consequences for the affected workers.

The third angle is propagated by the scientific community, which advocates for such protective equipment only for shorter durations. They argue that these PPEs (personal protective equipments) are the last line of defence.

Thus, employers save on the costs of establishing proper control mechanisms to prevent dust, by transferring these costs to the workers in the form of deteriorating health and lung ailments. Employers are correct and rational from their viewpoint. Workers are also right for demanding better protection against occupational health hazards.

The role of PR in OH becomes clearer if the issue of OH is examined from different vantage points, particularly that of employers and the workers. Consider the issue of wearing masks at a workplace as explained in the Box above.

The findings of the scientific community generally remain in books or within the four walls of seminar rooms. Quite often, when these two perspectives (mentioned in the Box above) clash, society intervenes in the shape of laws, which favour one of the parties. After the Industrial Revolution in United Kingdom for example, the impact of industrial pollution had been so disastrous, that a series of laws were passed to protect future generations of workers. After the Bhopal disaster, India also witnessed many new regulations to provide safe and healthy environment, but due to lack of awareness, these laws remained on paper. Workers are not empowered enough to ascertain the link between disease and workplace exposure to ensure societal pressure.

What better way to become empowered than being armed with knowledge? Is it not obvious that PR can play a major role in this clash of perspectives and it can help create more knowledge? Let us begin with the process of knowing more.

Occupational safety research is the study of the incidence, characteristics, causes and prevention of workplace injuries. An actively engaged workforce is fundamental to ensuring the success of all interventions on health and safety. It provides a 'reality check' for employers from the shop floor and helps ensure that the activities on health and safety lead to compliance. This is so because, the first people to realise something may be going seriously wrong in an organisation are usually those who work there. The workers are the people most at risk of having accidents or experiencing ill health, and they also know the most about the jobs that they do. So, they are in the best position to help managers develop safe systems at work that are effective in practice.

Although there is no set definition of what constitutes workforce participation, it is widely acknowledged that workers have basic rights to representation and communication with employers. At the very least, employers are legally obliged to ensure that their employees are provided with information about workplace hazards; are able to refuse to undertake tasks for which the risks are uncertain or pose an imminent threat; and, that they are consulted either directly or indirectly. Against this, workers' participation is solicited to reduce accident related absenteeism, increase production and hence an increase in profit.

7.4.2 Rationale for Workers' Participation

There are a number of strong prima facie arguments for wider inclusion of workers in decision making and planning for OHS. Typically, the justifications for workers' participation in OHS management can be broadly separated into three major categories.

a) Improvements in Psychosocial and Organisational Development

Improved social learning and industrial relations

Participation can promote and strengthen social learning. Inclusion of the workforce enables more debate, which has the effect of ensuring that more available options and assumptions are

questioned and tested. Following this line of thought, participation is seen as a problem of efficiency rather than democracy. Thus, individuals or groups contribute to a consultation process, because they are believed to possess some relevant 'lay' insight, which has the potential to enhance some aspect of the learning process.

The participative approach ensures that useful information that is known to workers, at lower levels, may be passed upwards with resultant improvements in knowledge distribution and acquisition. The workforce may possess valuable working knowledge of their capabilities and the potential for improvement within their domain, e.g. a greater awareness of any local working conditions and hazards. An output of improved social learning processes might be a well-designed procedure for monitoring accidents and near misses, and mechanisms for preventing future incidents.

There is enhanced potential for greater understanding on the part of the workers who are to execute initiatives which will result from participatory decision making. This may involve such factors as greater goal clarity, a better grasp of the methods to be used in accomplishing the work, or a more thorough understanding of the reasons for organisational changes, decisions and policies. Additional improvements in social learning can be achieved where workers are encouraged to provide feedback or formally participate in the evaluation of OHS programmes. Furthermore, feedback can provide a useful qualitative check on the practical performance of programmes. Through processes of social learning between employees and management representatives, and where cooperative working relationships are maintained, it is reported that worker's participation initiatives have the potential to improve industrial relations.

Improved commitment and job satisfaction

The motivational mechanisms of workers' participation are widely discussed by behavioural scientists. It is widely assumed that the process of participation at all organisational levels can result in workers becoming more clearly involved as stakeholders and therefore more committed to OHS management, and accepting any changes. In short, it is contended that levels of motivation are enhanced by internalisation of objectives, or acceptance via involvement. This, in turn, has been attributed to greater trust on the part of workers and greater levels of job satisfaction, which results from being consulted about proposed changes. Against this, it has been suggested that simply treating workers as recipients of OHS advice that stems from management decision making could be a possible cause of workers' resistance to change (and heightened anxiety, etc.). Workers' participation is regarded as one among several means of overcoming the debilitating effects of traditionally designed (e.g. hierarchical) organisations on their members. However, one caveat should be noted, participation will affect commitment and satisfaction differently for different people and situations, and may not be the most effective mechanism for generating any desired improvements.

b) Productivity and Efficiency Gains

Closely associated with improvements in employee motivation and social learning, and in some cases identified as a correlate, are studies that identify the potential of worker's participation to affect increases in innovative behaviour, economic efficiency and productivity. Employee

participation can be associated with higher motivation and performance, fewer intentions to quit, and lower turnover.

c) Rights and Legal Imperatives

A major motivation for the introduction of initiatives by worker's participation is the moral belief that workers *ought* to have the opportunity to become involved in collective decision making at work. This position is broadly based upon shared values regarding the rights of workers in democratic societies. In short, to offset the imbalance of power present in most workplaces and to afford greater levels of employee autonomy and participation, formal mechanisms are established through which employees can contribute to the operation of their workplace in a broader context beyond that of their specific job. Furthermore, workers' participation is considered to be one strategy that can align employer and employee interests and reduce the conflictual elements in the employment relationship**.**

7.4.3 Ways of Involving Workers

There are a number of ways to involve your workers in the improvement of health and safety standards. Given below are a few ideas.

Focused action: Concentrating on key issues, such as the cause of accidents or ill health, helps to develop focused action. Specific initiatives can then be developed in which employee participation can be central. If employees support measures for action on specific issues, they are more likely to implement them.

Briefing sessions: Briefing sessions, tool-box talks, etc., are useful to let people know what is happening and to get feedback from them. These sessions are the key to maintaining an initiative over time, however, they need to be stimulated and directed.

Surveys: Workforce surveys can help establish whether employees are retaining knowledge or are content with the health and safety standards. Follow-up surveys can help identify whether people's perceptions of health and safety have changed, and whether their knowledge of health and safety issues has improved. If followed up correctly, an organisation can then show that they have listened to the comments and acted upon the results. This helps establish credibility with the workforce and can lead to improved communications.

Working groups: Establishing working groups involving employees helps ensure that real working practices are taken into account. A working group could be either permanent or temporary, depending on the type of job it is being asked to do. No one size will fit all. A specific initiative will need just a temporary group. It should meet as often as is necessary.

Organisational resources: Often it is very difficult to get health and safety committees to look 'outside' their own resources when looking at problems or developing solutions. By drawing on others, such as the marketing department to identify ways of delivering health and safety messages to the workforce, general improvements in communications within the organisation could be realised.

Promotion: Bad news travels around any organisation like lightning; good news often travels much slower. Organisations do not always promote success as widely as they can, so make the most of your successes and promote them within the organisation. Case studies can be particularly powerful in relating the benefits of change.

Information: Information needs to be given clearly and simply so that people can understand it and it should be made relevant to their work. In many cases, it is best to brief workers face to face; this allows you to make sure you really get their attention and encourage them to ask questions. Managers and employee representatives should be given the chance to comment on drafts of written and visual material and to advise on the media that will work best for them, e.g. e-mail, videos, power point presentations, leaflets, posters, photographs, newsletters and in-house magazines.

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Why talk to your employees about health and safety?

Talking to employees about health and safety can result in:

- ***Healthier and safer workplaces*** *– because employee input is valuable in identifying hazards, assessing risks and developing ways to control or remove risks;*
- ***Better decisions about health and safety*** *– because decisions are based on the input and experience of a range of people in the organisation, including employees who have extensive knowledge of their own job and the business;*
- ***Stronger commitment to implementing decisions or actions*** *– because employees have been actively involved in reaching these decisions;*
- ***Greater cooperation and trust*** *– because you and your employees talk to each other, listen to each other and gain a better understanding of each other's views;*
- ***Joint problem solving***

Source: http://www.hse.gov.uk/pubns/web35.pdf

7.4.4 Forms of Participation

In real world settings, worker's participation in OHS management is commonly implemented through a number of discrete mechanisms.

Safety Committees confer upon workers and management alike an important means for dealing jointly with the prevention and the resolution of occupational hazards. They are generally composed of worker and management representatives; typical configurations include management only, joint union-management, joint employee-management, or employee only committees. It is not uncommon that outside experts attend committee meetings to provide additional information or insight. For example, trade unions may invite a regional representative or management may enrol the services of health and safety consultants. Safety Committees can play an important role in ensuring that information concerning workplace hazards is shared; workers and their representatives contribute to health and safety management; responsibilities and actions are discussed and approved; progress is monitored (given regular meetings or updates); operations become compliant with regulations and consensual outcomes are achieved.

Attitude Surveys have been implemented with a view to directly gaining wide-level 'participation'. Although the nature of the workers' input is characteristically determined by the design of the survey tool, this method has the potential to gain feedback on a wide scale, at relatively low costs.

Focus Groups **(or safety workshops)** are another example of direct participation, which has the advantage of face-to-face interaction, allowing the generation of a greater depth of participation. Focus groups are facilitated discussion groups. Focus groups allow the generation of relatively unstructured and natural conversations among small groups of people, who are specially recruited as participants. A focus group facilitator has the task of guiding the discussion, taking note of the key points and assimilating the worker's viewpoints and insights.

Quality Circle **(QC)**, sometimes referred to as **'safety circle'**, is a related form of participation with functionally similar attributes and outcomes. In addition to involving workers in discussions on OHS management, quality circles aim to directly engage workers in problem solving, decision making and OHS management.

The quality circles that are convened to discuss OHS issues tend to be composed of voluntary members from the same work area and usually in large workplaces. Circle discussions would be focused upon the identification of problems in OHS and methods to solve them. These groups have limited impact in that they can generate ideas, but cannot guarantee that the management will agree to their implementation. Some commentators have noted that for these groups to survive it is vital that the circle activities have the potential to be followed through, or that they can influence future management initiatives.

In order to ensure that the quality circle programmes become more durable it is widely held that:

a) Quality circles require support from managers and employees;
b) Groups should be provided with enough time to form an identity and specify clear agendas;
c) Training and information should be provided for circle members; and,
d) The group should be provided with regular feedback from the management.

Total Quality Management (TQM) systems, unlike quality circles, which tend to be discrete entities within a company, emphasise cultural change across the organisation. In this respect, total quality management would not relate to single issues like behaviour based safety, but improvements across the company that encompass safety and communication, etc. Problems that quality circles face can be remedied by adopting the principles advocated for total quality management; that management should have a distinct role in improving quality; that emphasis should be placed on decentralising responsibility downwards and that high levels of education and training should be provided across the organisation to inculcate mechanisms of change. The underlying message is that total quality management requires greater levels of organisation-wide participation; greater commitment of resources to be given over to activities that are not directly related to core business activities and that organisation structures are reshaped such that communication can be multidirectional.

7.4.5 Participatory Research as a Tool to Manage OHS

The field of OH has always been guided and controlled by technical groups comprising doctors, scientists and researchers. The reason being that there is an inbuilt understanding that human health is a very complicated subject, best understood only by persons who have spent years studying medical science. This understanding has also led to a 'fear of the expert' that has kept many at the periphery of the issue, acting as passive observers rather than active players. Cutting across these barriers and demystifying the technical jargon should be a focal aim.

In this endeavour, the PR approach comes in handy as it seeks to de-elitise and de-mystify research thereby making it an intellectual tool which ordinary people can use to improve their lives. This philosophy strongly believes on the fact that if the actors in the social setting become the owners of the knowledge they generate, the process of this elaboration can itself become an important step in awareness building and social change among the oppressed.

Participatory research adheres to the following principles in the context of managing OHS.

- ***A Reversal of Learning*:** to learn from the workers, directly, on the site, and face-to-face, gaining insight from their local physical, technical and social knowledge;
- ***Handing over the Stick*** (or pen or chalk): facilitating investigation, analysis, presentation and learning by workers themselves, so that they generate and own the outcomes, and also learn. This principle is linked to that of *empowerment* of those that are institutionally excluded and marginalised;
- ***Self-critical Awareness*:** facilitators continuously and critically examine their own behaviour. This includes embracing error, facing failure positively, correcting dominant behaviour (including the need to ensure *informed consent* among local participants in the research process) and being critically aware of what is seen and not seen, shown and not shown, said and not said, and how what is shared and learnt is shaped and selected by the context and the social process of interaction;
- ***Personal Responsibility*** ("Use your own best judgement at all times"): Participatory research practitioners tend to take personal responsibility for what is done rather than relying on the authority of manuals or on rigid rules;
- ***Sharing*:** of information and ideas between local people, between them and outside facilitators and between different facilitators. This principle is linked to that of transparency on the part of participatory practitioners in relation to motives and intentions in the research process.
- ***Learning Rapidly and Progressively*:** with conscious exploration, flexible use of methods, opportunism, improvisation, iteration, and cross-checking, not following a blueprint programme but being adaptable in a learning process;
- **O*ffsetting Biases*:** by relaxing not rushing, listening not lecturing, probing instead of passing on, being unimposing instead of important, and seeking out those who are being marginalised;
- ***Optimising Trade-offs*:** relating to the costs of learning to usefulness, with tradeoffs between quantity, relevance, accuracy and timeliness. This includes the principles of optimal ignorance, not learning more than necessary, and of appropriate imprecision, not measuring what need not be measured, or more accurately than needed;

- ***Triangulating*:** means learning from several (quite often three), methods, disciplines, individuals or groups, locations, types of information, items and/or points in a distribution, to cross-check, compare, and gain insights;
- ***Complexity and Diversity*:** seeking and enabling the expression and analysis of complex and diverse information and judgments; seeking variability rather than averages; maximising the diversity and richness of information.

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Workplace Health Promotion - What is it?

The European Network for Workplace Health Promotion has defined workplace health promotion as the combined efforts of employers, employees and society to improve the health and well being of people at work. This vision of workplace health promotion places particular emphasis on improving the work organisation and working environment, increasing workers' participation in shaping the working environment, and encouraging personal skills and professional development.

Workplace health promotion supports a participatory process to help promote a stronger implementation of occupational and environmental health legislation. It suggests tools for maintaining or strengthening a national healthy workplace initiative, such as an awards system as an incentive for participating enterprises, and creation of healthy workplace networks. To be successful, workplace health promotion has to involve the participation of employees, management and other stakeholders in the implementation of jointly agreed initiatives and should help employers and employees at all levels to increase control over and improve their health.

Source: Workplace Health Promotion, WHOhttp://www.who.int/occupational_health/topics/workplace/en/index1.html

THINK TANK

- *What is the role of participatory research in OHS?*
- *Why do workers need to be involved in OHS?*
- *What ways and methods could be used to involve workers?*

7.5 Conducting Participatory Research for OHS

The basic premise of conducting PR is the involvement of the researcher and the researched as equal partners in all the three stages of research, i.e. identification of the topic, the research process and the use of research findings. In conventional research, there is alienation of the researched from the research process. Given below is the methodology developed by PRIA through its experience of working for more than two decades on similar topics.

7.5.1 Identification of Research Question

All the stakeholders, viz. workers, shop floor supervisors, managers, workers, activists, play a major role in the identification of the topic to be explored. Open and collaborative discussions among the management, workers/ representatives and experts are held to explore and identify the various aspects of issues and questions for further research cum study. After the issue is identified, workers sit with researchers to further unpack the problem. The workers share their shop floor experiences, symptoms and other socio-economic conditions, while the researcher provides them with theoretical inputs on production processes, probable diseases and provisions under the law. This stage, ideally, should include all those who are likely to be affected by the outcomes of the research and action as participants in decision making about all stages of the research process. This stage also acts as an important means of building intellectual capacities of both employers and employees and thus reducing their dependence on outside professionals and intellectuals.

7.5.2 Conducting a Survey

Questionnaire Preparation

Based on discussions (see 7.5.1), an open ended questionnaire is prepared with the consent of all participants. Workers participate in identifying the questions. It is advised that such questionnaires must have few but precise questions in the local language.

Data/Information Collection

In sharp contrast to conventional research, in this approach since people (workers in this case) are the subjects of research, the dichotomy between subject and object is broken. The worker's representatives/groups themselves collect the data, and then process and analyse the information. Here the knowledge belongs to the workers and they are the primary beneficiaries of this knowledge creation process.

Guided by the open ended questionnaire prepared in the earlier stages, the worker's representatives spread out to approach the workers (in turn leads to wider dissemination of information and awareness), discuss the questions with them, add or edit issues, questions, problems, etc. This process not only helps to get the real issues out in the open for discussion, it also acts as an eye-opener for the workers. It helps the workers to reason, makes them aware about the 'real issues' and also makes them feel connected and not isolated from the decision making processes. Thus, participation of the workforce enables a fuller debate; provides an enriched information base (for further action), leads to acquisition of an increased sense of safety initiative ownership among the workforce, has a positive impact upon both quality and productivity at the workplace and consequently improvement in industrial relations.

7.5.3 Processing of Information/Data

The workers themselves collect the information and data, and then process and analyse it. Intending to bring out the number, diversity, size, and seriousness of the hazards involved at the worksite(s), this entire process has an in built mechanism to ensure the authenticity and genuineness of the information/data that is generated. The whole exercise of knowledge production infuses in the workers, the real survivors s, a sense of struggle for workplace safety

and also throws up relevant issues or problems for the management, trade unions, etc. to reflect on and analyse and then assist in arriving at conclusions.

This process also helps in identifying potential survivors from the large sample base. Such cases with positive symptoms are collected and tabulated for further clinical examination.

7.5.4 Diagnostic Camps

Diagnostic camps cater to medical surveillance requirements for specific substances or hazards associated with the worksite. They aim at providing medical screening related to specific chemicals or exposures, including physical examinations, job placement assessments, periodic examinations, and maintenance of individual employee medical records. No organisation can cover thousands of workers for clinical examination. So, such camps help in identifying cases for follow-up. The discussion group, which had participated in the survey, sits along with doctors to understand the logic and techniques of clinical diagnosis. It is not expected that this group of workers will become experts in diagnosis or disability assessment, but at least the basic logical process is shared. On a broader scale, this process is intended to manage and/or treat work-related illnesses and injuries, with emphasis on early recognition and intervention; and follow-up and monitor workers as they return to work, provide guidance for case management of employees who have prolonged or complex illnesses and injuries, arrange for clinical tests of workers and other services to monitor employee health, rule out exposures to toxic substances or prevent the spread of disease, in accordance with local health and safety regulations. The major clinical tests include:

- Testing of exposure to arsenic, asbestos, benzene, cholinesterase inhibitors, ethylene oxide, isocyanates, lead, mercury, silica, vinyl chloride, etc.
- Mobile Audiometery Service (Hearing Test)
- Pulmonary Function Test (PFT)
- Mobile X-Ray services.

THINK TANK

Describe how to conduct PR for occupational health and safety?

7.5.5 Preparation of Report/Sharing of Information

The outcome of the research/study/survey is documented and shared with the workforce, management, experts and all those concerned. This stage is basically aimed at theorising *about* the problems and *practices of the workers*. As an outcome of the PR, primarily two types of reports are prepared. The medical report of individual workers/victims is used for follow-up for compensation and treatment, whereas collective reports are used for policy change and advocacy for implementation of safety and health procedures. The main outcome, importantly, is mobilisation of workers around the issue of occupational health. This mobilisation will not only help workers in thinking scientifically and avoid bargaining for hazard money, but also help the employer in designing policies and practices for prevention.

NOTE BANK

PRIA's Experience: Participatory Diagnostic Camps

Diagnostic camps were conducted with workers in the organised and unorganised sectors with the following purposes.

- *Gauge the magnitude of prevalence of occupational diseases and ailments prevailing in the various industries for effective follow-up and advocacy.*
- *Share with the workers the popular knowledge about workplace conditions health and safety provisions at the shop floor.*
- *Demystify medico-legal terminologies pertaining to the workplace and explaining them to the workers.*
- *Explain and share the medical test reports (of byssinosis and noise induced hearing loss) to the workers, and facilitate them so that they can claim the compensation due to them. Needless to say, that the compensation received by workers was undoubtedly financial support for the workers and their families, especially when the working (and therefore earning) capacity of the worker is affected, either partially or totally.*
- *Capacity building of the workers by hands on training to use a ventilometer and audiometer.*
- *Apart from disseminating knowledge on medico-legal aspects, these camps also helped in doing advocacy with the Employees State Insurance Scheme to make it more participatory.*

Sampath Tapare of Mumbai Textile Mill, a National Textile Corporation Mill was the first person to receive compensation in Mumbai in 1995. He was affected by byssinosis. The identification of byssinosis and receiving compensation was a result of the diagnostic camps and facilitation in claiming the compensation by Occupational Health Safety Committee (OHSC). This had a remarkable impact not only on the awareness on OHS among workers, unions and management; but also facilitated in pressurising the management to provide safer working conditions, e.g. exhaust fans to absorb cotton dust on the shop floor and also masks to the workers.

The most prevalent diseases among these workers were byssinosis, noise induced hearing loss, radiation injury, injury from sulphuric acid fumes, death and diseases due to chemical exposure, chemical dermatitis, pelvic bone fractures, fractures of the femur, silicosis, blood borne occupational diseases, etc.

Till 2003, through these camps, across 19 textile mills, 1045 workers have been tested for byssinosis and 978 for noise induced hearing loss. The OHSC has issued certificates of disability to 356 workers for byssinosis and 389 workers for noise induced hearing loss. The last Medical Board was held in Mumbai in May 2003. Till now the special Medical Board has declared that 260 workers have been suffering from byssinosis and 341 workers from hearing loss. The total compensation received is Rs.1; 93,903 per month and Rs.1, 36,966 per month for byssinosis and noise induced hearing loss, respectively.

Another 22 workers have also received compensation in Aurangabad. The involvement and participation of women has been minimal in these camps, partly because of the occupations covered. If women were there, they were reluctant to come for check-ups in front of their male colleagues. There have been also instances of the the Special Medical Board rejecting many of the women who were diagnosed of being affected by occupational disease/s. Diagnostic camps at Crompton & Greaves were one of the few which were solely held for women workers and they participated actively.

(Based on a study conducted by OHSC, Mumbai and PRIA, New Delhi)

7.6 Glossary of Terms

- **Attitude Surveys:** Data collection techniques designed to collect standard information from a large number of subjects concerning their attitudes or feelings. These typically refer to questionnaires or interviews.
- **Diagnostic camps:** Diagnostic camps are organised to provide free and subsidised health check-ups for workers. Ideally, diagnostic camps provide deep resources and skilled staff to all attendees. Additionally, these camps serve three purposes, spread education and awareness (inform the working community about serious diseases, their symptoms and preventive measures and also provide access to trained healthcare professionals), prevention and management of diseases (promote healthy lifestyle, elimination of risk factors and early detection of diseases) and treatment of diseases (identify the diseases before they become chronic so that they can be effectively treated without impacting quality of life or causing mortality).
- **Focus groups:** A focus group is a form of qualitative research in which a group of people are asked about their attitude towards a product, concept, advertisement, idea, or packaging. Questions are asked in an interactive group setting where participants are free to talk with other group members. In the world of marketing. Focus groups are an important tool for acquiring feedback regarding new products.
- **Participatory Research (PR):** Participatory research is a collaborative model that promotes the development of critical partnerships and the application of research conclusions in the process of community development. It is a means by which the expertise of primary care researchers can produce new knowledge through developing research partnerships with the community. The knowledge, expertise, and resources of the involved community are frequently the key to effective research and problem solving. There are three critical attributes of the PR model, collaboration throughout the research process, a mutually rewarding educational experience for researchers and community members, and tangible action based on research results. Collaborations promote sharing of decision making throughout the research process, from refining the question and undertaking the research to interpreting the data and jointly disseminating the results. A critical process goal is for the community to build its own capacity by developing skills, applying research results to improve the quality of life, and planning for future health needs. In addition, the PR model more effectively answers the questions that emerge from within communities, thereby increasing community capacity building and sustainability.
- **Quality circle:** A quality circle is a group composed of regular employees who meet together with management to discuss workplace improvement. It is an instrument for quality enhancement and quality assurance that uses groups of peers to assess and discuss the quality of their own work and develop strategies for improvement. The concept was invented in Japan in the early 1950s and did not reach the United States until 1974.
- **Safety Committee:** Safety Committee is an organisational structure where members represent a group. It is one of the best methods of improving a company's safety programme as it provides both employees and the employers an opportunity to communicate and evaluate safety and health issues at the workplace. A Safety Committee is a group that aids and advises both management and employees on how to develop effective safety measures and set safety standards and provide guidance on dealing with a variety of emergency and critical incident situations.
- **Safety workshops:** Safety workshops are informal, but interactive participation and discussions held amongst experts and all affected by safety situations and standards of a workplace. The attendees ideally include people involved in the following areas of interest - facilities design, construction, plant operation and maintenance, improved safety products and equipment, training and safety services, government agencies, forensic engineering, standards development, legal and medical professionals. The workshop should not be designed as a tutorial or training seminar, but as an open forum for exchanging ideas and experiences involving work practices and technology. Safety workshops basically focus on the practical application of codes, standards, technology, and implementation methods that reduce the risk of occupational injury and hazards at the workplace.
- ***Total quality management:*** *A management philosophy committed to a focus on continuous improvements in the product and services with the involvement of the entire workforce.* Total quality management *is a complete reorganising of the work process and the workplace by the application of*

principles of "teamwork' and work "teams" that are supposed to involve the worker and give them greater control in their work. It involves "teams" of workers monitoring and controlling each other in their work process, production and application of agreement or employer policies.

7.7 Recommended for Further Reading

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- http://www.hse.gov.uk/pubns/web35.pdf
- *WHOhttp://www.who.int/occupational_health/topics/workplace/en/index1.html*

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