

HEALTH AND THE WORK - PLACE oh-115

The Law and Occupational Health

The Directive Principles of State Policy, in the Constitution of India calls on the government to direct its policy "towards securing that the health and strength of workers are not abused and the citizens are not forced by economic necessity to enter avocations unsuited to their age and strength." It also directs the states to "make provisions for securing just and humane conditions of work." (1)

However, there is no comprehensive legislation which deals in detail with problems of occupational health in the country. The 3 Acts, which come anywhere near translating these principles into practice are:

- 1) The Factories Act of 1948.
- 2) The Employees State Insurance Act of 1948 (ESIA) and
- 3) The Workman's Compensation Act of 1923 (WCA).

A review of these 3 Acts shows that a large number of workers are not included in its purview and therefore can be exposed to any amount of hazards without hindrance. The Factories Act covers manufacturing units using power with 10 or more workers, or units not using power with 20 or more workers (Miners come under a separate Act; restaurant and hotel workers now come under the preview of the Factories Act). The ESIA which does not distinguish between powered and non-powered units, covers those having 20 or more workers. The Workmen's Compensation Act includes, besides the above, others such as miners, shipcrew, construction workers, firemen and plantation workers.

From the coverage of the Acts, it is evident that workers in small sweatshops all over the country, construction workers and those contracted by outside contractors within the large units are not protected at all by the Factories Act or the ESIA.

The agate workers of Khambhat, Gujarat, who cut, grind, polish and carve agate stones into ornamental items, are one example of this. Every year they produce finished goods worth 10 to 12 lakh rupees which are exported to the USA and Africa. As they work at home, the entire family is exposed to silica dust, which is responsible for the high incidence of various lung diseases. One such survey of agate workers puts the incidence of these disease at 63.5% compared to 35.6% in the control group. Even children as young as 11 years were found to be suffering from serious lung disease. Because their workplace does not get qualify as a "factory" as defined in the Acts, agate workers cannot even hope for any legal aid or compensation. (2)

The Factories Act

Chapters III, IV & V of the Act prescribe certain broad guidelines for preventive health care in those manufacturing units specified earlier. However, they set no specific standards and regulations for protecting the health of workers. This and the granting of exemptions in some cases has been left to the discretion of the state governments. Thus the guidelines are more like general recommendations.

In the sub-section on dusts and fumes, for example, the Act states that "effective measures shall be taken to prevent its inhalation and accumulation in any workroom, and if any exhaust appliance is necessary for this purpose, it shall be applied as near as possible to the point of origin of the dust, fume or other impurity..". (3) The specific "effective measures" and the number of exhaust fans required are determined by the Factory Inspectorates of each state.

Similarly on the subject of "disposal of wastes and effluents", the Act states that effective arrangement shall be made in every factory... so as to render them (wastes and effluents) innocuous and for their disposal". (4) The regulations prescribing the "effective arrangements" are again left to the state governments. In its chapter dealing with special provisions, the state governments are left to devise and apply specific rules to "any factories, or class or description of factories in which the manufacturing process exposes workers to "serious risk of bodily injury, poisoning or disease." (5) The Maharashtra Government in its Factories Rules of 1963 (considered to be one of the most rigorous among the various states) has classified 21 processes as "dangerous operations" (See table 1), and detailed regulations pertaining to each of these have been prescribed.

Enforcement of the Factories Act

Although the rules are rigorous, the enforcement mechanisms, the personnel and their functioning leave much to be desired. The Factories Act provides that each state is to have a Chief Inspector of Factories, who is the primary enforcing authority. Chief Inspectors staff comprises Certifying Surgeons and Inspectors.

Cerifying Surgeons examine all factory workers and supervise the diagnosis and treatment of occupational diseases. They are also responsible for determining the health hazards in any new manufacturing process or of any new manufacturing process or of any new substances used on the shop floor. For Maharashtra, there are only two Certifying Surgeons and one of them is also one of three Medical Inspectors in the state.(6)

within the category "Inspectors" there are those responsible for enforcing safety standards, working hours and ensuring the general welfare of workers, and there are Medical Inspectors, specifically responsible for monitoring the health of workers.

Inspectors are supposed to visit every factory in the state at least once a year. They may conduct spot-checks, of the ear-shot of managers. They may also examine any document relating to the factory.

In most states, Factory Inspectorates are chronically under staffed and illequipped to inspect and maintain occupational health and safety standards. While the Labour Minister Conference ten years ago recommended that there be an inspector for every 150 factories in a state today an inspector has to cover at least double this number. In certain states like Bihar, one inspector has to visit 1,100 factories per year.(7)

In Maharashtra, the most industrially advanced state with about 19,000 factories, there are only 96 inspectors.(8) In addition there are three medical inspectors and a fourth post is still unoccupied (of the three filled posts one had been vacant for over ten years has been filled only recently).(9) According to Dr. Surendra Nath of the Central Labour Institute, Medical Inspectors are poorly paid and there are few avenues for promotion - Medical Inspectors are hardly even promoted to the post of Chief Inspector.(10)

Furthermore, workers, doctors and social workers allege that there is little commitment, on the part of inspectors to improving the health status of workers. Workers often complain of collusion between the management and inspectors, and have even levelled charges of corruption. In one asbestos company, workers claim that for many years now, a certain high ranking official in the state health administration has been passing off cases of asbestosis as tuberculosis, and other lung ailments.(11) The obvious conclusion is that the management finds it cheaper to purchase the official concerned, than to pay the heavy compensation that an honest verdict on his part would entail.

Some multinational corporations have taken advantage of our lax enforcement of occupational health standards. In mid-1981, New Scientist reported on poor working conditions in the asbestos units with multinational corporation connections. Though they took "every precaution for workers safety and health in their own countries (asbestos workers in the West have been active in pressing for more stringent regulations), the units in India had undertaken very few anti-pollution or dust control measures".(12)

Another important trend is the farming out of certain dangerous parts of the manufacturing process to the ancillary or small scale sectors. Being small unorganised units, these escape the umbrella of the Factories Act.

The Employees State Insurance Act and The Workers Compensation Act.

These two Acts of the Union of India as well as the Insurance Acts of the states deal with the curative and compensation aspects of the problem of occupational hazards.

The Employees State Insurance Act (ESIA) established the Employees State Insurance Corporation (ESIC) to provide certain benefits in case of sickness, maternity and employment injury to workers whose monthly income is less than Rs. 1000 (in the kinds of units specified earlier). Sick leave without loss of wages is also ensured in case of employment injury, in which are included physical injuries, the 22 occupational diseases in the Factories Act (Table 2) and

1. Coal Miner's Pneumoconiosis - accumulation of coal dust in the lungs.
 2. Telegraphists cramp.
 3. Bagassosis - accumulation of sugar cane fibres in the processing of sugar cane.
 4. Compressed air illness - as a result of working in factories using processes with air under high pressure.
- Occupation dermatitis is not included in this Act's list of diseases for which medical benefits are obtained, although other skin diseases including chrome ulceration (formation of holes and cracks in the skin due to chemical-chromate and bichromate-exposure) and skin cancer are mentioned. Given that occupational dermatitis is included in the Factories Act's list of diseases, its omission in the ESIA is puzzling.

The ESIA consists of member nominated by the central government those representing each state government and and union territory, representatives of employees and employers, and the medical profession. A smaller group, chosen from the members of the Corporation listed above, constitutes the "Standing Committee". This Committee implements the ESIA with the help of officers at the state level. Its finances are drawn from compulsory monthly contributions by employers and employees.

Those not covered under the ESIA (such as miners, ship crew construction workers, firemen and plantation workers) but earning less than Rs. 1000/- per month can claim compensation for 'injury during employment' (as defined in the ESIA UNDER the Workmen's Compensation Act of 1923.

Occupation Health - The Reality.

Laws and enforcement mechanisms notwithstanding, occupational health levels in India have barely improved. Dr. Surendra Nath, Deputy Director (Medical) of the Central Labour Institute (CLI) has discussed current studies in his paper "Occupational Diseases in Industries - a review." (13) The results of over a dozen research projects on noise levels, silicosis, dermatitis and benzene poisoning, to mention a few, present a very sobering picture of occupational health in India. In the dermatitis study, for example of 2,129 workers examined, 63.17% were affected with "various types of skin lesions." Research involving 3,792 textile workers reveal that 29% suffer from various grades of byssinosis as against the earlier figure of 12% obtained in a study conducted by two hospitals and the CLI in Bombay during 1970-75. (14)

Reasons for the low levels of occupational health are not difficult to find. We have already seen how existing legislation is not comprehensive and how implementation of the law is a farce.

In addition, information about work-related health hazards is not freely available to workers, either because it does not exist or is concealed, or because it is not considered sufficiently important to educate workers. In several cases, the effects of a particular chemical or of dust in the workplace may not appear for years. Sometimes, as in the case of the nuclear industry, radiation effects may only appear much later, in the offspring.

Moreover, in a country like India, where workers may suffer from ill health due to poverty, it is difficult to distinguish between a work-related disease and one connected to the workers living environment. What is clear, however, is that occupational health hazards exacerbate already existing low levels of health. Thus the condition of a textile worker, already suffering from tuberculosis, may deteriorate further because of exposure to cotton dust.

While managements, medical inspectors and others are quick to assert that "education" will do much to improve existing occupational health levels, the very information required for this education is not made available to workers. Investigatory and advisory institutions like Bombay's Central Labour Institute (CLI) conduct detailed research on health hazards in certain factories (often at the management behest). The results of such research, along with recommendations made by the CLI are strictly confidential. One copy is sent to the management and another to the Inspectorate of Factories of the state concerned. The latter then determines which recommendations are realistically enforceable. Copies of research reports, with the name of the factory neatly deleted, are made available to the public later.

In addition, knowledge of certain chemicals and manufacturing processes are considered "trade secrets" and the management is reluctant to divulge these. Workers are rarely informed of the potential hazards of their work before deciding to take up a job. And even if they were, it is unlikely that this would influence their acceptance or rejection of a job. A job applicant makes the decision to accept a job for reasons of economic need, job availability and his or her capabilities and preferences, rather than on the basis of health and safety considerations.

Some studies have even shown that workers are aware of the health hazards at their workplaces, but feel they have no option. In Mandasaur district Madhya Pradesh, workers in the state pencil industry have a high incidence of silicosis. They admitted that they knew of the dangers of their jobs, but were forced to work in this industry as there was no alternative means of livelihood. (15)

Workers are also given incorrect information on the prevention of occupational health hazards. Milk is provided to workers exposed to lead as a means of countering lead poisoning. Milk was once thought to help accumulate and immobilise lead in the bones. However, Mr. Chakravorti and Dr. Bhar of the Directorate General of Factory Advice and Labour Institutes have written: "The prophylactic efficiency of milk as an antidote for lead poisoning has never been demonstrated unequivocally; on the other hand, some studies rather indicate that milk may facilitate lead absorption... As a general principle in the prevention of occupational poisoning, no beverage or medicament (for example vitamin C for benzene exposure...jaggery for dust exposure, etc.) should ever be considered an adequate substitute for effective technical control of the hazard." (16)

All of the above, point to a lack of commitment to the health of working people. And with labour such a cheap and readily available commodity, why should a manager care if a worker was coughing all night? There is a head-on collision between the management's primary quest for profit and the interests of workers.

Preventive measures to minimise health hazards like masks and special clothing are an added expense and if managements can cut corners, they will -- unless challenged.

The challenge will have to come from workers and their unions. Support action by health groups and concerned professionals including journalists is also necessary. They could form citizens and workers health and safety groups to monitor risks on the shopfloor and demand legal action. Major demands could be the 'right to know' the kind of toxic substance used in the workplace and legislation to tackle the problem of occupational hazards comprehensively. On the other hand, workers will also have to be vigilant to ensure that their demands for better health and safety provisions do not lead to increasing mechanisation followed by retrenchment.

Ultimately, the only lasting solution lies in actual workers' participation in the management of the shopfloor, if not collective ownership. Organising workers around occupational health may prove to be one more effective way to do this.

Case History - Occupational Dermatitis.

A few months ago a male patient came to the skin department of a public hospital for treatment. The skin on his entire face and body was rough, dry and full of scales. When exposed to sunlight, it would itch. He suffered from no other disability. He had been working as a watchman at a chemical factory for over fifteen years. He reported that the gate he guarded was near the chemical processing unit of the factory, and that he had a history of occupational dermatitis. He had come to the hospital without the knowledge of his employers. He reported that there were other people at his work place who had the same skin diseases. As the watchman's condition was severe, he was hospitalized and after a while his skin cleared up. He asked the management if he could be paid compensation, since he was not provided safety measures. The management was unwilling to pay compensation and asked him to resign if he did not want to work under the given circumstances. The watchman chose to continue at his job.

What is occupational dermatitis ?

Occupational dermatitis, the disease which the watchman was suffering from, is an inflammation of the skin. The skin becomes swollen, red, tender and itchy. It oozes and later becomes scaly. Sometimes bacteria invade the affected skin and produce boils and spots. Dermatitis only involves the skin and is not contagious.

How is it caused ?

Occupational dermatitis is caused as result of the handling and exposure to thousands of chemicals. Some of these, called primary irritants (alkalis and acids, for example) affect that part of the skin with which they come into contact.

There are also certain substances that remove natural oils from the skin. These include certain solvents; thinners degreasers like paraffin and turpentine and tars and coal products.

In addition there are certain substances that produce an allergic reaction in a particular worker, although others may not be affected by it. Physical agents can also harm the skin, causing disease. These include heat, cold, water, sunlight, X-rays and other radiation, soot, dust and grit (especially when this gets between the skin and clothes and causes friction).

MAL-2
Mechanical damage is yet another cause of occupational dermatitis. At work the skin is subject to the formation of thousands of little punctures and minute injuries.

Certain oils and watery fluids make the skin soft and permeable and the cells below the outer layer of the skin lose their protective function and become vulnerable to bacterial invasion and disease.

Industries in which occupational dermatitis occurs

Occupational dermatitis is one of the commonest industrial diseases. Workers in chemical and plating factories and in the textile mills are very susceptible to the disease. In paint factories, solvents in the paint cause dermatitis. This is also true in printing presses, and the skin is further irritated by the use of lead, tin, and antimony types.

In addition, workers in engineering units are highly prone to dermatitis because of their exposure to cutting and lubricating oils and degreasers. Finally, with the increasing use of chemical additives in the food and confectionery industries, there is a high incidence of dermatitis among workers in these factories.

Workers in these factories will have to be vigilant about any new substances or process used on the shopfloor and obtain information about the possible health hazards. If any infection of the skin or allergic reaction occurs, medical authorities must be consulted at once. At the same time legal action can be taken as dermatitis is included in the list of occupational diseases in the Factories Act.

Workers suffering from occupational dermatitis are not entitled to any medical benefits and sickness leave by the Employees State Insurance Corporation. Nor are they eligible for any remuneration under the Workmen's Compensation Act. Thus, workers have to resort to either private doctors or government dispensaries for treatment and like the watchman, they are forced to return to work as soon as possible or face unemployment.