

## DISCUSSION

# Silicosis: A public health emergency in India

JAGDISH PATEL

### Abstract

*Occupational health is a public health emergency, long ignored in India, primarily as it is considered more of a class issue than a public health problem. The economic impact of mortality and morbidity associated with occupational diseases (OD) and accidents at work is nowhere a priority, resulting in the absence of reliable estimates and credible data on ODs. There are no laws for the protection and preservation of health at work for over 90% of workers in the unorganised sector. These should be a priority across economic sectors, along with laws to compensate workers and citizens for environmental contamination. In spite of the Employees' State Insurance Act, 1948 for the workers in the organised sector, and the Employees' Compensation Act, 1923 for both, organised and unorganised sectors, most of the victims have to depend upon doles paid by the State schemes for financial assistance in case of silicosis.*

**Keywords:** *silicosis, occupational health, compensation, occupational diseases*

Silicosis, one of the oldest occupational diseases (OD), poses a serious challenge to public health in the 21<sup>st</sup> century. The human race has made considerable technological progress. India is proud to have launched Chandrayan, the Mars orbiter mission, Aditya 1, and so on; but on earth, we are not able to control one of the oldest known occupational diseases. Thirty years ago, when we founded Peoples Training and Research Centre, and started working on the issue of occupational diseases, we thought that, given our limited resources, we should concentrate our efforts on fatal ODs. After 30 years, we have still not been able to resolve the challenge of silicosis

Occupational health, in general and silicosis, specifically, is a public health emergency ignored for a long time as it is seen as a working-class issue not a public health problem. Poor workers are a dispensable commodity, and their health is not of any importance to the state or to industry. India aims to be a world leader and compete with countries like China, Russia, the USA and European countries. Economists convince us that India is growing at a rate of 8%, and our economy is the 5<sup>th</sup> largest [1], and so on. But we have no data on the burden of disease. Noncommunicable diseases (NCDs) and lifestyle diseases are given some weightage now; but the economic impact of the mortality and morbidity associated with ODs and accidents at work is nowhere considered as a priority. Not only do we not have any credible data on ODs, but we do not even have reliable estimates to compare with the actual data and the progress we have made, if any.

Silica, used widely in industry, gives off toxic dust that impacts workers gradually, but does not give any warning of early exposure, unlike chlorine or ammonia. Hence, those exposed to it do not take prevention seriously. Silicosis is asymptomatic in its initial stages, and when the symptoms become obvious, it is already too late to arrest the progression of the disease. Lack of medical monitoring at the workplace prevents early diagnosis. Laws for preventive measures are applicable to a small minority of workers either in the organised sector, in manufacturing, mining or construction. Not that service sector workers are not at risk. We have come across cases where workers are working with silica in a warehouse, or a flour mill in a back lane, or in glass etching in a shop, sometimes even located on a main road.

Over 90% of industrial workers in India are in the unorganised sector [2], with no laws for the protection of their health or safety at work. Interestingly, there is no separate ministry or department for workers in the unorganised sector. Hence, whenever a question is raised in the assembly or parliament by an elected member on silicosis, or any other occupational disease, the question is referred to either the State Labour Department or the Director General of Factory Advice Service & Labour Institutes (DGFASLI) who have no data, as they are not mandated to look after workers in the unorganised sector [3: pp 81, 129]. Thus, the response presented to the member may be completely misleading. We have been advocating that the monitoring of workers' health — whether in the organised or unorganised sectors, whether in manufacturing, mining, construction or the service sector — should be assigned to the Health Department, which may set up a separate cell for dealing with it.

As for the diagnosis, it is not as difficult as people imagine. What is required is that the correct occupational history should be given to the physician. Most workers do not know the technical terms for the materials they are exposed to. If asked for their occupational history, they fail to say that they are exposed to silica particles at work. When I asked a well-known occupational health expert in Copenhagen what specific facilities are required in a general hospital for diagnosis of an occupational disease, he replied "heart"! If a physician has a good heart, they will not only ask the history, but if they realise that the worker is unable to explain, they will go out of the way to get the exposure history and make a diagnosis. In Ahmedabad, a physician, along with a toxicologist, contacted the factory inspectorate for the

exposure history of a patient they were treating and arrived at a very interesting conclusion. They found that the patient had been exposed to polyacrylate dust, which was not generally known to be toxic, but the exposure led to Interstitial Lung Disease (ILD) and the patient died soon after. Our intervention in the matter then led to a *Suo Motu* public interest litigation (PIL) [4]. None of our public hospitals have any separate outpatient department (OPD) for occupational diseases. So, if a patient is suspected of suffering from an OD by a medical officer at a primary health centre (PHC), where would they refer the patient for confirmation and further tests? Which of our public hospitals possesses a set of International Labour Organisation (ILO) standard pneumoconiosis X-ray plates for comparison with the patient's X-ray and for diagnosing the categorised status of the disease? Why? How many radiologists examine the X-rays or CT scans and provide an opinion? How many PHCs/CHCs (Community Health Centres) have digital, good quality X-ray machines? Why are we not investing in the healthcare of citizens?

It is not only the workers engaged in a particular occupation who can contract silicosis. We have seen cases of non-workers suffering from silicosis and dying prematurely. In Khambhat, Gujarat, agate workers polish the stones at home, where family members are also exposed to the fine silica particles and get silicosis. The National Institute of Occupational Health (NIOH) carried out a study which found that, in Khambhat, the incidence of silicosis among non-workers was as high as 6-13% [5]. In the latter half of 2024, we came across a woman diagnosed with silicosis, despite never having worked outside the home. Her husband was a ceramic worker for a long time, but he remains healthy. The couple was given a room within the factory premises in Morbi, through which the powder-laden trucks would pass, exposing the woman to it. They stayed there for only four years, and she still contracted the disease. In Morbi, Than, Godhra, Kadi and many other industrial places we have seen that the employers build rooms within the factory premises for workers and their families. There is no law prohibiting them from providing accommodation for workers and their families inside the factory premises. The case cited here is not the only such case. The system of allotting rooms within the premises is more convenient for the factory owners than for workers, though migrant workers also welcome this system as they can save on room rent, travel expenses and travel time.

What to do? — a question asked by Leo Tolstoy is relevant for us too, today. Legal protection for the workers in all economic sectors should be a priority. We already have a National Policy on Safety, Health and Environment at Workplace, declared in 2009, which states — “Government is committed to regulate all economic activities for management of safety and health risks at workplaces and to provide measures so as to ensure safe and healthy working conditions for every working man and woman in the nation. Government recognizes that safety and health of workers has a positive impact on productivity

and economic and social development. Prevention is an integral part of economic activities as high safety and health standard at work is as important as good business performance for new as well as existing industries.” [6] This has remained only on paper. The ILO Occupational Health and Safety Convention, 1981 (C.155) and Promotional Framework for Occupational Safety and Health Convention (C.187) now form part of the fundamental conventions, and all the member countries are expected to ratify these conventions. India is yet to ratify them. If ratified, we will have to revise our laws accordingly.

Having legal protection is one thing and enforcement is another. In every state, vacancies in the department enforcing the Factories Act are around 30-40% on average, across all political parties in power in the states. The Occupational Safety, Health and Working Conditions (OSH) Code, 2020 which is replacing the Factories Act will push millions of workers out of legal protection for safety and health as the Code is applicable only to factories employing 20 or more workers [7], while the Factories Act was applicable to units employing 10 or more workers. If at all, we ratify ILO 155, how are we going to protect the workers in small units, which will not have the economic capacity to invest in workplace environment monitoring, medical monitoring and investment in safer technology. The State will have to provide subsidies for safer technology on the one hand and on the other, shoulder the responsibility for environmental and medical monitoring. Can we discount how corruption at every level impacts the health of the workers? When the law is violated, is the employer fined or jailed? What about the overburdened judicial system? What about the weak legal provisions for fines, the feeble representation by Government departments in Court when complaints are filed?

It is shocking that neither the health department nor the labour department have fulfilled their crucial role in the silicosis crisis that we have today in India. The Supreme Court order in PIL 110/2006 [8] directed the National Human Rights Commission (NHRC) to see that the next of kin of workers dying of silicosis are paid “compensation” by the State. The NHRC had then played a very vital role and published some important documents including a report submitted to Parliament. Had a group of activists not filed a PIL in the Supreme Court, I wonder where we would have been today. In spite of these efforts by the NHRC, only a handful of states — such as Gujarat, Rajasthan, West Bengal, Jharkhand, Chhattisgarh, Haryana, Delhi and Madhya Pradesh — have reported silicosis in their states [9]. There are sporadic reports from Telangana, Uttar Pradesh, Jammu & Kashmir and Odisha, but no reports from states like Maharashtra, Karnataka, Tamil Nadu, Kerala or Bihar on any cases of silicosis. Not that these states have no capacity to diagnose silicosis but a lack of political will deprives us of any credible information.

For compensation, we have the Employees' State Insurance Act (ESI) Act and Employees Compensation Act, but we have no law for victims of environmental pollution. How difficult it is to claim compensation under both these laws is well-known. If the unit is located in the ESI notified area and is employing 10 or more workers, and if the workers are drawing a salary of Rs 21,000 or less, they are eligible for cover under the ESI Act. However, most workers are not provided cover by the employers to save on the premium to be paid to the ESI Corporation. As the article by Upreti et al [10] records, most workers are not issued identity card as provided by the Factories Act and cannot prove their employment in court while applying for compensation under the Employees Compensation Act. Even when someone has successfully got a court order in his/her favour, it is difficult to recover the amount from the employer. As a result, most of the victims have to depend upon the doles paid under some State scheme for financial assistance.

There is no short cut to what we expect. Ours is a labour surplus country where it is difficult to get workers organised to fight for their rights. On the other hand, healthcare services are being privatised. Even ESI services are not at all satisfactory. When it comes to workers' health, neither the public health sector nor private healthcare services are satisfactory. These issues are not election issues, and no political party can be influenced to take them up. Still, there is some progress, though very slow.

**Authors:** Jagdish Patel (jagdish.jb@gmail.com), Director at Peoples Training & Research Centre, Vadodara, INDIA.

**Conflict of Interest:** None declared

**Funding:** None

**To cite:** Patel J. Silicosis: A public health emergency in India. *Indian J Med Ethics*. Published online first on June 21, 2025. DOI: 10.20529/IJME.2025.051

**Submission received:** November 12, 2024

**Submission accepted:** January 28, 2025

**Manuscript Editor:** Sandhya Srinivasan

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