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Asbestosis in an asbestos composite mill at Mumbai: A prevalence study

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* Corresponding author: V Murlidhar murlidharv@gmail.com*Environmental Health: A Global Access Science Source* 2005, **4**:24 doi:10.1186/1476-069X-4-24**Healthy Worker Effect among ex-asbestos workers: A prevalence study**

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Healthy Worker Effect among ex-asbestos workers: A prevalence study

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The study identified those suffering from Asbestosis (parenchymal and pleural non-malignant disease) among the permanent workers of the Hindustan Composites Factory [1]. The prevalence rate of Asbestosis in study was 23%, which was less than the expected prevalence among workers exposed to asbestos for more than 20 years[1].The primary reason suggested for the lower prevalence was the "healthy worker effect". Many affected workers had been forced to leave the company or to take voluntary retirement. Some may even have died due to the disease. Hence, the workers remaining in the factory were relatively healthy workers. During the course of the earlier study we got a list of 648 workers, who had formerly worked with the company. We started to trace the workers over a three year period from May 2006 to April 2009.The residence addresses of several workers had changed as they had to move due to drought conditions in Maharashtra State and also due to the pressures of privatization and globalization. Many workers had since died and many were living in areas that were difficult to access. Of the 648 ex-asbestos workers, we were able to trace 462 workers. Of these 462 workers, we could obtain chest radiographs and perform lung function tests in 385 workers. We found that 114 ex-workers had Asbestosis. The prevalence rate of Asbestosis among ex-asbestos workers was 33%, in contrast to the 23% prevalence rate recorded in the study of active workers in the same factory[1].

The primary reason suggested for the low prevalence in the study was the "healthy worker effect". Many affected workers had been forced to leave the company or to take voluntary retirement (VRS). Some may have died due to the disease. Hence, the workers who remained in the factory were relatively healthy workers[1]. This hypothesis is proved by the analysis of supplementary data. Though a few studies have been conducted among ex-asbestos workers [2-6], there has been no study of the prevalence of Asbestosis among ex-asbestos workers in India.

Ex-asbestos workers live in the community and many have difficult access to medical facilities. Even if they get access to a medical facility, their disease is rarely diagnosed. One of the reasons is that doctors are poorly trained in recognizing and diagnosing occupational diseases [1, 7-9]. Occupational disease is taught as part of the much-maligned subject of Community Medicine. Additionally, most colleges do not have ILO radiological plates, which is mandatory for diagnosis. These plates used for comparing the patients' X-ray with a standard are not available even in top medical colleges in India. Also there is no post-graduate degree in occupational health in any of the major medical colleges in India. The ILO plates are difficult to procure and are costly and hence, medical students and doctors are totally unprepared to diagnose asbestosis. Consequently even a first ranking radiology physician cannot diagnose asbestosis. He invariably certifies the X-ray as normal [1, 7-9].

The ILO plates are used as study material in some institutes like Central Labour Institute (CLI) that give a diploma in Occupational health. But, the candidates chosen to attend the courses are mainly industry appointed doctors who learn it in order to arm themselves to argue against genuine asbestosis cases. Though any registered medical practitioner in India is legally eligible to diagnose Occupational diseases like Asbestosis, they have a faulty impression that they have to be an expert in order to diagnose it. As a result, there are very few unbiased medical doctors willing to diagnose occupational diseases keeping in mind the context of the industrial workplace and the workers' rights [1, 7-9]. The Industry clearly has an interest in maintaining the status quo that provides little practical recourse to workers to claim their rights, especially given the high labour surplus in the country.

The attitudes of both doctors and other relevant professionals in diagnosing Asbestosis are also influenced by a bias among the professional class against blue-collared workers in general[1, 7, 9]. At times, this leads to medical professionals deliberately misguiding workers who come to them with occupational and environmental health problems related to asbestos[7].

In addition to the problems in diagnosis and access to medical facilities, issues of labour migration and rural poverty make it imperative that the government takes an active role in the finding ex-asbestos workers, educating them about their rights and helping them avail of these rights. Many of the workers live in remote rural areas and they are forced to frequently change their residence due to the economic adversities caused by privatization and globalization from which they have no social welfare-net protection. This makes it very difficult for voluntary organisations like the OHSC to trace all the listed workers. The efforts will continue but we recommend that the State Government should trace all these workers and get them diagnosed and compensate them as per the Law.

We found a much higher prevalence of Asbestosis among ex-asbestos workers as compared to an earlier published study of active workers from the same factory[1]. This proves the hypothesis of the "healthy worker effect" which was suggested as one of the reasons for a lower prevalence in active workers. There are less than 30 cases of Asbestosis compensated in India among the 100000 exposed workers. Many must have died of the disease or of lung or pleura cancer. Workers involved with asbestos are to be medically checked by the management every year while continuing in such a job and after he has ceased to work in such a job[1]. This is a specific responsibility of the employer in any factory having any hazardous process. All the workers who have left the place of employment with asbestos exposure, under a voluntary retirement scheme or otherwise, need to be medically checked, once a year at the very least[1]. This is their legal right. This brings to light the urgent need for measures to protect the workers even after they have finished employment in a hazardous facility. By describing the context of occupational health and safety in India, this supplementary data further underscores the higher vulnerability of ex-asbestos workers in the context of forced labour

migration and shows that the current environment is insufficient to protect workers from Asbestosis and highlights the need for the Government to take active steps in protecting the health and safety of workers.

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Competing interests

Nil

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