

THE GLOBAL MESOTHELIOMA LANDSCAPE 2015

Laurie Kazan-Allen

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Defending a decision about Iraq taken by the Department of Defense in 2002, United States Secretary of Defense Donald Rumsfeld said:

“Reports that say that something hasn't happened are always interesting to me, because as we know, there are known knowns; there are things we know we know. We also know there are known unknowns; that is to say we know there are some things we do not know. But there are also unknown unknowns -- the ones we don't know we don't know. And if one looks throughout the history of our country and other free countries, it is the latter category that tend to be the difficult ones.”

Rumsfeld's comments sprang to mind when I was considering the current global mesothelioma landscape. In a situation where reliable mesothelioma data for 70% of the world's population is missing,¹ how can we realistically assess the worldwide impact of this deadly asbestos cancer?

Let's look at what we know in relation to two countries:

- between 1994 and 2008, the UK and Australia had the world's highest age-adjusted mesothelioma mortality rates per million: 17.8 and 16.5, respectively;
- cumulative asbestos usages by the UK and Australia were 7 million and 2 million tonnes respectively;²
- exposure to asbestos has caused the worst occupational disease epidemics in both countries.

In light of these facts and knowing that mesothelioma is caused by exposure to asbestos, it is not unreasonable to suggest that the more asbestos used in a country, the higher the incidence of mesothelioma. The increasing use of asbestos in developing countries is grounds for serious concern.

The Global Asbestos Trade 2014

When we compare asbestos use in 2012 to that in 2000 we can see that the largest increases in consumption have taken place in Asian countries.³

¹ Delgermaa V, Takahashi K. et al. *Global mesothelioma deaths reported to the World Health Organization between 1994 and 2008*. Bulletin World Health Organization 2011.
<http://www.who.int/bulletin/volumes/89/10/11-086678/en/>

² Australian data were provided by Robert Virta from the United States Geological Survey. Email sent on March 11, 2013.

³ The basis of our calculations is data sourced from United Nations trade statistics and supplied by the United States Geological Survey (USGS). Both bodies have reported difficulty in obtaining reliable production and export data from some countries, including Kazakhstan and Russia. Wild variations from year to year underline the unreliability of some of the figures; annual figures may provide a snapshot of the current status quo but for a more accurate understanding of trends it is considered preferable to average data over a period of years.

Asian Countries Showing Marked Increases in Annual Asbestos Consumption, 2000 to 2012 (averaged data)

	2000 (tonnes)	2012 (tonnes)	Increase
China	387,000	580,000	50%
India	143,000	378,000	163%
Indonesia	37,000	147,000	300%
Uzbekistan	35,000	67,000	91%
Vietnam	24,000	66,000	175%
Sri Lanka	13,000	46,000	251%
Total	<u>639,000</u>	<u>1,284,000</u>	100%

Note: Tonnage data appearing in this table represent USGS apparent consumption values averaged over 3-year intervals (e.g. appearing under year 2012 are averages of consumptions for 2011, 2012, and 2013).

In 2011-2013 Asia accounted for 72% of global asbestos consumption; even more remarkably, during this period around 90% of all exported asbestos ended up in Asia.

The majority of the 2 million tonnes of asbestos used in 2013, was consumed in Asian countries with few, if any, controls on hazardous exposures. Throughout the region, the majority of asbestos-related diseases go unrecognized, untreated and uncompensated. A 2013 “Medical Skill and Assessment Report of Asian Occupational Health and Safety Capacity” was categorical about the:

- “extreme problems” faced by workers to obtain a correct diagnosis and correct medical treatment of occupational diseases like asbestosis; throughout most of Asia, mesothelioma is virtually unknown (undiagnosed);
- prohibitive costs of travel to healthcare centres, medical tests and treatments;
- ignorance of most doctors about occupational diseases;
- shortage of diagnostic equipment, laboratories and specialist doctors;
- long delays in obtaining diagnoses and certificates of illness;
- lack of awareness amongst workers and doctors of benefits available for work-related diseases and/or the legal rights of the injured.

Case Study: Asbestos Use in India

Between 2011 and 2013, India used an average of 375,000/tonnes of asbestos per year; 90% was for the production of corrugated roofing sheets and water pipes.⁴ More than 300,000 people in India are employed by companies producing or processing asbestos-containing materials. Millions of construction workers are handling asbestos products on building sites with little or no protection.⁵ Commenting on the situation in India, grassroots activist Mohit Gupta of the Occupational and Environmental Health Network of India said:

⁴ Gupta M. *Asbestos and its Use in India – the Real Picture*. October 2014.

⁵ Ramamurthy Karnan. *Asbestos Issues in India*. May 2014.

“Asbestos is a threat to everyone, not just workers. From children in schools, to young and old in private and public buildings wherever asbestos is present, whole communities are at risk. Banned in most developed countries, asbestos is India’s next big killer. There is no safe level of exposure, so there is no acceptable level of exposure. Due to daily toxic exposures, many jobs in India are virtual death sentences. Companies aren’t penalized for taking short cuts on employee safety and most doctors don’t know how to diagnose occupational diseases. There is an immediate need to identify all victims of asbestos related disorders and provide medical treatment, rehabilitation and compensation for them. To prevent more avoidable deaths, an immediate ban on the use of this material is of utmost importance.”

Dr. Helen Clayson seconded these views:

“My experience of running the SHWAAS study has opened my eyes to the multiple disadvantages faced by the workers in the asbestos industry in India. Not only do they work in appalling conditions but they have no job security, no union protection, no basic human rights and no voice. In addition, they do not receive good medical care when they develop asbestosis but instead tend to be charged huge amounts for inappropriate and ineffective treatments, these costs create severe financial hardship for those with asbestosis and their families. Those victims who manage to get medical attention are often misdiagnosed as suffering from asthma or tuberculosis. The experience of living with asbestosis in India is truly awful not only for the individuals but for their families and communities. I have no doubt that given the prevalence of asbestos products and the continuing and increasing use of asbestos in India, the country is facing an asbestos time bomb.”⁶

There is no question that there is an information vacuum on the incidence of asbestos-related disease in India. Some data has, however, been obtained:

- 850 former Indian employees of the British asbestos giant – Turner & Newall – have obtained compensation of £900 – £14,000 (Australian \$1,740 – 27,000) for asbestosis and lung cancer from the company’s UK Trust.⁷
- Between 1985 and 2005, the Tata Memorial Hospital in Mumbai, Maharashtra treated 107 cases of mesothelioma.⁸
- 102 cases of mesothelioma have been diagnosed at Ajmer General Hospital, Ajmer, Rajasthan; it is believed that the injured worked for Indian Railways (confirmation of this is being sought).

Discussion

In the bad old days, industry propaganda dominated the asbestos dialogue in India. Vested interests alleged that:

http://ibasecretariat.org/bwi_vienna_conf_pres_2014_ramamurthy_karnan.pdf

⁶ From 2012-15, Dr. Clayson collaborated with partners in India on the development of a community-based volunteer-led self-help low-cost and low-tech intervention (SHWAAS) to alleviate breathlessness due to asbestosis in an Indian setting.

⁷ Email from Krishnendu Mukherjee, March 19, 2015.

⁸ Letter from Tata Memorial Hospital to Pralhad Malvadakar. June 12, 2008.

- chrysotile (white) asbestos was safe;
- current working conditions ensured zero risk from workplace exposures;
- asbestos contained within cement products was “safely” locked into a matrix and could not be inhaled;
- asbestos was essential for India’s economic development;

In recent years, these lies have been challenged by grassroots activists, health and safety campaigners and medical professionals. Working with like-minded colleagues from various sectors of civil society, they have pioneered efforts to:

- identify and support victims of asbestos-related diseases in rural as well as urban areas;
- research environmental asbestos contamination and highlight consequences for local populations;
- support local communities in their objections to the building of asbestos factories;
- develop a community-based, low-tech intervention to alleviate breathlessness due to asbestosis;
- provide a counter voice to industry propaganda;
- challenge the government’s pro-asbestos policy.

In 2013, India was one of seven countries to block UN action to regulate the global trade in chrysotile (white) asbestos. Addressing the plenary session of the meeting of the Rotterdam Convention, the Indian spokesperson opposed the categorization of chrysotile asbestos as a hazardous substance saying that there was no significant environmental or work hazard posed by the use of chrysotile and therefore no need to take action.

To support its pro-asbestos policy, the Indian Government commissioned research as a result of which a report entitled “Study of Health Hazards/ Environmental hazards resulting from use of Chrysotile variety of Asbestos in the country” was published. This document, which was issued by the National Institute of Occupational Health, was partially paid for by the asbestos industry.⁹ The report’s conclusions are, given its genesis, unsurprising: chrysotile asbestos poses no occupational or public health hazard to Indian citizens.

Last month (March 21, 2015), a statement was issued by dozens of scientists and groups from around the world which called on the Indian Government to withdraw this report.¹⁰ “The study has no scientific credibility,” wrote Dr. Philip Landrigan, President of the Collegium Ramazzini and Dean for Global Health, Icahn School of Medicine, Mount Sinai, New York. “It is flawed in the design, methodology and interpretation of the results.” Professor Dr Arthur Frank of Drexel University’s School of Public Health, Philadelphia, USA agreed:

“Almost without exception, the studies, as written, have significant flaws and represent a lack of proper understanding of the development of asbestos related disease. For example,

⁹ *A Fox in the Hen House*. February 2008.

http://oehni.in/files/fox_hen_house.pdf

¹⁰ Statement of scientists on the ‘scientific’ study by National Institute of Occupational Health (India) titled ‘Study of Health Hazards / Environmental hazards resulting from use of Chrysotile variety of Asbestos in the country’. <http://www.rightoncanada.ca/wp-content/uploads/2015/03/Statement-of-scientists-re-chrysotile-asbestos-March-21-2015.pdf>

age should never be used as a parameter, rather than years of employment, and better yet, the best measure to use is years from first employment with a disease not expected to be prevalent much before 20 years or longer. Anything shorter than that will, either purposefully, or accidentally, mischaracterize the development of disease.”

This critique is being widely circulated in India and will be the focus of public meetings in India in the run-up to this year’s meeting of the Rotterdam Convention due to take place in May 2015.

Conclusion

Returning to the “wisdom” of Dr. Rumsfield, we know that:

- asbestos has been widely used for over a century;
- wherever it has been used, people have died prematurely of asbestos-related diseases;
- asbestos is still being used and consumption in some parts of the world is increasing;
- the asbestos plague will continue until the deadly dust is banned worldwide and the contamination is eradicated.

Only when the world is asbestos-free will we eliminate the deadly threat of asbestos cancer.