To die for? The health and safety of fast fashion

If the world wants an image that sums up the true cost of supplying big-name retailers with cheap, fast fashion, it only has to look at the horrifying images that emerged from Dhaka in April 2013. This is now the deadliest garment-factory accident in history [1]. The death toll from the building collapse at the Rana Plaza complex in the Savar district of Greater Dhaka, Bangladesh stands at more than 1100 making it the world’s worst industrial accident since the Bhopal disaster in India in 1984 and worse than the Triangle Shirtwaist Factory fire of 1911 that prompted American legislation requiring improved factory safety standards. Since 2005, at least 1800 garment workers have been killed in factory fires and building collapses in Bangladesh alone according to research by the advocacy group International Labor Rights Forum [2] and the problem affects many other countries where cheap clothes are manufactured.

Prior to the collapse in Bangladesh the factory owners had been repeatedly asked to close the factory because of concerns about the structural safety of the building after cracks appeared and a bank on the second floor of the same building sent its workers home the day before. The building was built three floors higher than it had been designed or licensed for and there were concerns about how building permits were obtained. The Bangladeshi government has publicly acknowledged that as many as 90% of Dhaka’s high rise buildings do not meet local construction standards, let alone international rules. In the aftermath of the disaster, thousands of workers demonstrated against poor safety standards. The factory supplied clothing companies Primark and Matalan amongst others.

There have been repeated building collapses in Bangladesh but fire is the greater hazard in clothing factories. In September 2012 two fires on the same day in separate garment factories in Pakistan killed more than 300 workers [3]. Between 300 and 400 workers were inside the first factory when a boiler exploded and the flames ignited stored chemicals. Officials said that all the exit doors in the factory were locked and many of the windows of the factory were covered with iron bars, making it difficult for workers to escape. Consequently many of the deaths were caused by suffocation and many of the workers could not be identified not least because they had no contract of employment. The factory owned by ‘Ali Enterprises’ manufactured denim, knitted garments and hosiery that it exported to Europe and the USA. Ali Enterprises employed between 1200 and 1500 workers and had a capitalization of between $10 and $50 million while its workers earned $52–$104 a month. A security guard who took refuge in the factory supplied clothing companies Primark and Matalan amongst others.

analogous to prison cells. The owner had reportedly pre-
vented inspections of the factory.

Fatalities in the clothing industry don’t just happen in Asia. The denim jeans we wear may be manufactured much nearer to home and still cause worker deaths. Denim fabric originated in the French town of Nîmes, literally ‘de Nîmes’, and denim trousers were first made in Italy during the Renaissance and sold through the harbour of Genoa, an important naval and trading power, hence ‘jeans’ from the French phrase bleu de Gênes. The Genoese Navy required all-purpose trousers for its sailors that could be worn while swabbing the deck and the denim material met this need. The trousers were laundered by dragging them in nets behind the ship, which gradually bleached them to white. Initially, jeans were simply sturdy trousers worn by workers, especially in the factories during World War II. They generally fitted quite loosely, much like a pair of bib overalls without the bib, and women’s jeans had the zip down the right side. Until 1960, Levi Strauss, who made some of the earliest American blue jeans from 1873, denominated its flagship product ‘waist overalls’ rather than ‘jeans’. After James Dean popularized them in the movie ‘Rebel Without a Cause’, wearing jeans became a symbol of youth rebellion during the 1950s and then ubiquitous as the baby boomer generation grew up. Jeans were trendier and more fashionable if tight and worn-looking, something initially achieved by wearing them in the bath, so fading and shrinking them. With punk it became fashionable to have holes in your jeans and the manufacturers eventually cottoned on to this trend as jeans became designer clothes. First there were stone washed jeans and then distressed jeans, the effect created through the use of sandblasting, a process invented by Benjamin Chew Tilghman (1821–1901) an American soldier and inventor although it seems unlikely that he would have envisaged his process being used on clothing.

The introduction of sandblasting introduced the possibility of silicosis in an industry where products are often produced in poor working conditions. In 2003 Turkish investigators published a case study in the Journal of Occupational Health [4] that looked at a number of small workplaces employing 10 or less workers carrying out sandblasting of jeans contracting to larger companies. None of the five workplaces examined had sufficient local exhaust ventilation and workers were not using effective respiratory protective equipment. The sand being used contained up to 95% quartz and up to 15% feldspar. The dust exposure levels were 20 times the recommended levels with respirable dust containing free silica exposures of 76 mg/m³ against a permitted level of 0.25 mg/m³. Of 11 denim sandblasters studied (mean age 32) over a third had radiological evidence of silicosis. In a separate case study in 2005 researchers from the School of Medicine at Ataturk University in Turkey reported two cases of silicosis in sandblasters [5]. The cases, aged 18 and 19, had radiological evidence of silicosis and open lung biopsy confirmed the diagnosis. Both had been employed sandblasting jeans for less than three years. The authors reported that this was the first instance of silicosis being reported in this occupation.

In 2006, Occupational Medicine published an enlarged case series from the same hospital [6]. Between 2004 and 2006 the researchers admitted a further 14 cases of silicosis in young men working as denim sandblasters. The mean age was 23 and the mean duration of employment in this work was three years. The first two cases who had featured in the original case study [5] had died. With commendably swift action, the Turkish government banned the process of denim sandblasting in 2009 [7]. Cases of silicosis have continued to be reported [8] and there have been some estimates that there are over 5000 cases of silicosis within Turkey although accurate up to date figures are hard to find. However, the sale of sandblasted jeans continued and the practice of sandblasting shifted to other countries particularly Bangladesh. In 2012, The Clean Clothes Campaign report ‘Deadly Denim: Sandblasting in the Bangladesh Garment Industry’ [9] found that mechanical sandblasting continued to expose workers to silica dust and that mechanical sandblasting was largely carried out in unsealed environments with little protection for workers, using inadequate safety equipment. Despite this report not all manufacturers were prepared to issue statements clarifying their stance on the situation and whether the practice continued within their supply chains [10].

Publishing research papers about workers in their twenties dying from silicosis in a prospective member of the European Union is a shocking indictment on its own but the problem with clothing manufacture extends far further. The whole issue of health and safety in the global clothing industry raises questions about our collective responsibility not just as occupational health and safety professionals but as people who wear and buy clothes. Can we merely blame the clothing industry or do we all as purchasers of cheap clothes have responsibility for the disaster in Bangladesh and the numerous others that afflict the clothing industry worldwide? Do we really want fast fashion that workers give their lives for? Not to mention the extensive abuse of workers, whether through child labour, poor working conditions or exposure to other occupational hazards such as solvent and adhesives for instance those used in sports shoe manufacture. Paraphrasing David Blair in the Daily Telegraph ‘If you are going to make money by selling products on the high street you have an obligation to ensure a basic minimum of decency in the conditions in which they are produced. That was recognized in 1802 when the first Factory Act was passed limiting the hours that British women and children could work. Today the women and children work in Bangladesh not Bradford but they are equally deserving of safe and healthy working conditions. Is it just and proper that Bangladeshi women die making a £1.50 T-shirt worn by our children?’ [11] Our collective
dependence on other workers supporting our lifestyle should bring with it a collective responsibility [12].

Some positive measures are being taken. Last year the US owner of Calvin Klein and a German retailer signed the Bangladesh Fire and Building Safety Agreement providing for the independent inspection of every factory used by a supplier [13]. However at present many British retailers have either not signed or declined to say whether they would although there is some evidence that this might be changing [14]. In the meantime everyone in occupational health has a responsibility to consider how we can best support initiatives to ensure no further fast fashion ‘victims’.

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References