

Biology

Health of garment workers

RecyCOOL Lessons

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Health of garment workers

Description of the lesson

First we are going to learn about the different risks affecting the garment workers, then go step by step to examine each one deeper. After that we will do a task so as to explore solutions to help protect these workers. Finally we will get some tips on how we can try to ensure that as consumers, we are not supporting the exploitation of workers in garment and textile factories.

Objective

Objective of this lesson is to see the health risks of garment production. To understand that garment workers' physical and mental health might be endangered by the circumstances they are working in. To be aware of what we as consumers can do to help improve the health and well-being of garment workers

After this lesson you will be able to:

- list those working conditions the factory garment workers have to endure daily
- name some of the diseases they can possibly contract while working
- explore some options for us as consumers to help prevent this exploitation in the fashion and textile business

Tools and materials:

pen/pencil, paper

HEALTH:

"A state of complete physical, mental and social well-being and not merely the absence of disease and infirmity."

SWEATSHOP:

Crowded factory with very poor, socially unacceptable or illegal working conditions.

EXPLOITATION:

Unfairly using people as a workforce for someone's own advantage and usually for profit.

OCCUPATIONAL HAZARD:

Danger, or level of risk in the workplace.

Right now, how do you feel in your body? Can you say you are healthy? After the COVID pandemic, people are more aware of their bodies and of staying healthy than ever before. But do you know that being healthy is a gift? It cannot be taken as it is something everyone has, but rather it is a desired state of being, where you don't suffer from pain or dysfunction in your body and mind.

All over the world people spend a lot of money to stay healthy or recover from an illness, while some people have to endure risky or unhealthy work environments just to put food on the table for themselves and for their families.

This is especially true for workers in the textile factories. Many young women and children work in conditions like extreme heat and dust, with no breaks, and they are being exposed to the many chemicals this industry is using.

In this lesson we will walk through a factory and see how they work, and how it affects their health.

If you were to step into a textile factory in Asia, you might be surprised by the working conditions. For example, if the factory is not a modern, well-lit, ventilated and safe one, but rather the opposite. These factories are also called sweatshops or sweat factories.

You would think that working with textiles wouldn't bring the same level of danger found in things like mining, being a soldier or an astronaut, which are considered to be risky jobs. But the truth is that this industry has a bad reputation for harming its workers and causing serious health issues all over the world.

Normally in healthy workplaces, health and safety regulations are important. Like using protective clothing, masks, gloves, having breaks, access to first aid and healthcare. Some companies even offer insurance for their workers. But in unfair garment factories, workers do not get these at all.

A study showed that among 200 women in Bangladesh the major health problems were: back pain, eye strain, pruritus (itching), malnutrition (being unable to eat healthily), respiratory problems, gastric pain, fatigue, fever, abdomen pain, common cold, and helminthiasis (parasites). Women constitute more than 80 % of the workers.

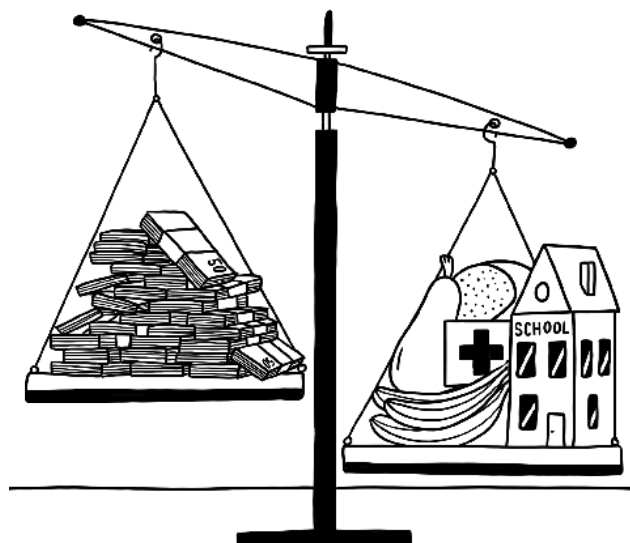




Photo credit: M. Hasan

Let's start with the chemicals used in these factories.

They are used for different purposes, like to make the textiles wrinkle-free, to soften them, to prevent them from shrinking, to achieve a flame-retardant effect, for waterproofness, stain-resistance, or to dye the textiles with. Some of these have a very damaging effect on the human body when workers are coming into close contact with them.

The heavy metal content of dyes may disrupt the nervous system. Wrinkle-resistant clothes have been treated with formaldehyde, the worst type of chemical, since it not only irritates the skin, but it also has a role in developing certain kinds of cancer.

Exposure to these chemicals may cause skin irritations, allergic reactions, asthma, but also there is a risk of developing cancer, reproductive and developmental diseases. And to make things worse, many factories let the contaminated wastewater from production into the living waters, which affects the whole community living nearby.

A concrete example: In Savar, Bangladesh because of the wastewater, the river turned black, and since people didn't have another option for drinking, it caused fever and skin irritations on the hands and faces of people. The application of some of these chemicals is restricted by law, but not all are regulated. Those who are working with the treated clothes are in danger, but the customers wearing the clothes are less likely to be affected by the chemicals.

There are organisations, like Greenpeace, who campaign for the elimination of toxic and hazardous chemicals. In 2012, they ran a project for analysing chemicals in clothes from different brands and they found high levels of toxins in them. They also launched the Detox My Fashion campaign in 2013, in which they hold companies responsible for the releasing of these toxins into nature, and put pressure on them to drop their practices.

Photo credit: Lu Guang/Greenpeace



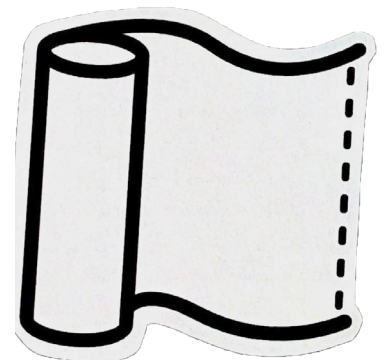
What about dust?

If I tell you dust is a big issue, you might say it isn't. But think about it. When you work with textiles, tiny particles fall out of them, and when you spend 10-12 hours in a room that is not well-ventilated, they will end up in your lungs. It might just cause difficulty in breathing and tightness in the chest, which can be reversible, but if you work there for long years, you may develop byssinosis, also known as "brown lung" disease.

And this is permanent. The shortness of breath may make people incapable of doing their job normally. In particular, cotton dust is additionally hazardous because of the pesticides, as well as the bacteria and fungi that remain in the cotton even after the harvesting and processing.

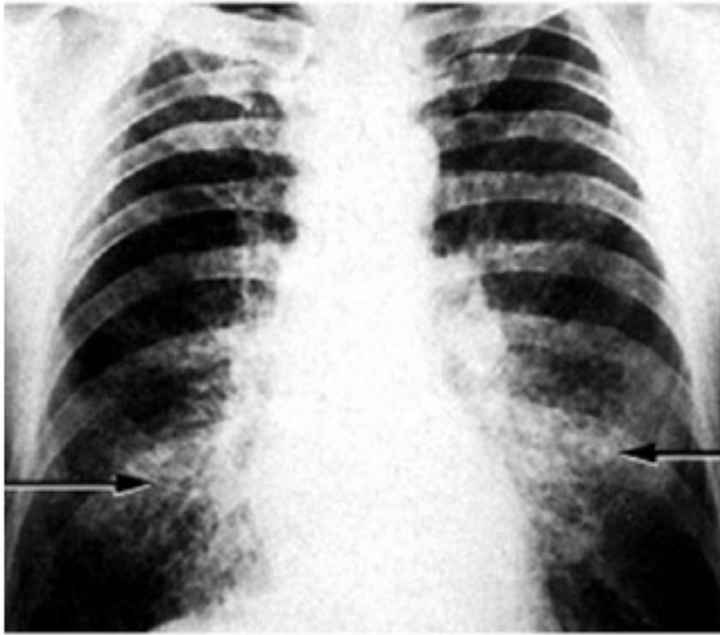
Dust can come out of sandblasting, too. It is a technique to make jeans look worn out. To achieve this washed out effect, workers remove the dye from the fabric with an air compressor that contains rubbing particles. It is actually so hazardous to health, that it is now forbidden to use.

If these silica particles are inhaled, they can cause serious respiratory problems, but intense and long-term exposure may even result in fatal diseases, like silicosis (sand dust accumulating in lungs) or lung cancer. It can actually cause death within months or years of starting work as a sandblaster.

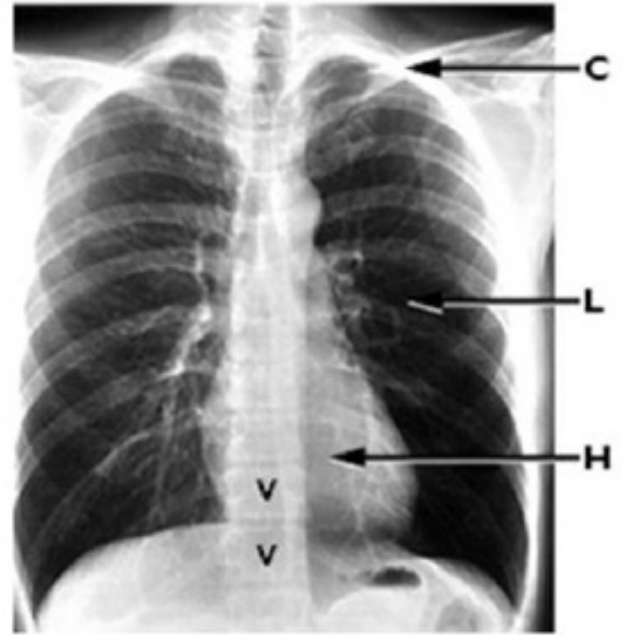


See the comparison between a healthy and an silicosis affected lung.

Chest X-Ray: Silicosis



Normal X-Ray



An abnormal chest x-ray shows multiple nodules (arrows) on the lungs caused by silicosis. A normal chest x-ray is shown on the right for comparison; the heart (H), lungs (L), vertebrae (V), and collarbone (C) can be seen.

Photo credit: [Blog gang](#)

You can watch [this video](#) on dry ice blasting, it's another way to make jeans look worn out. This process might replace the traditional sandblasting. It won't cause silicosis, but it has its own dangers, it has to be done with protection.

Noise risks

Noise can be an issue coming from the lots of machines operated nearly non-stop. **The exposure to loud noise might result in irreversible hearing damage or even hearing loss.** Noise is one of the commonest health problems in the textile industry and problems can be difficult to detect because the effects build up gradually over time.

For example, **a case study** was carried out with a 50-year old male textile worker, who suffers from hearing loss caused by loud machines in the textile factory.

He was working over 30 years as a dyer. First he noticed hearing loss at the age of 37, when he went to the hospital for a check up. He found he had over 50% hearing loss in both ears. He continued to work, but kept losing his hearing more.

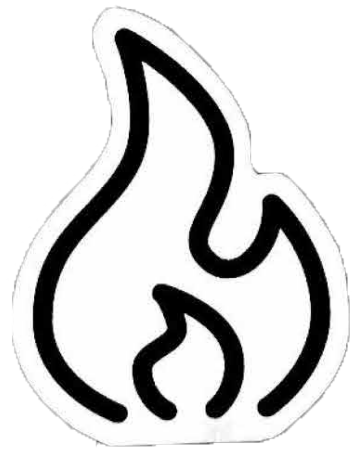
Now he can't even work as he doesn't have the money to buy hearing aid. And it is only one case of the many unfortunate people involved in the textile industry.



Hot and humid air

Having to endure the heat, together with having no proper ventilation can cause headaches and fainting. The reason why humidity is needed at textile factories is that the textiles remain thicker, stronger and elastic. Also, some countries have humid climates and use no air-conditioning for the workplace.

And for ironing the clothes, often a lot of steam is used and those people constantly ironing textiles may feel dizzy, have low energy and lethargy. High humidity can cause hyperthermia – having an abnormally high body temperature as a result of the body's inability to deal with the hot environment.



Other hazards

Biological hazards can be bacteria, fungi, other living organisms like parasites, and even rats, cockroaches, etc.

Psychosocial hazards can be working with many people in the same room and sometimes also living with them after work. It can be quite stressful to endure so many people non-stop without having any alone time. And not to mention the stressful conditions: being hurried or rushed, yelled at, or physically abused.

Sexual harassment also takes place daily in the life of textile workers. Women are often forced to abort pregnancies to keep their jobs. One survey showed that 8 in 10 said they had experienced or witnessed sexual harassment and violence at work.

Ergonomic issues repetitive tasks done for long working hours without breaks can lead to neck pain, lower back pain, eye strain, etc.

Malnutrition is caused by not having enough and proper food for a longer period of time. Bangladesh suffers some of the highest rates of malnutrition in the world, like iodine deficiency disorders to anaemia.

Poorly nourished women often give birth to underweight children, creating an intergenerational cycle of malnutrition and unfulfilled potential. But just because this study has been made in Bangladesh, we do not have the reason to think that it is the only country where it is happening.

Task

Watch [this video](#) about safety at the workplace:

It shows an investigative journalist looking at working conditions in a factory in Bangladesh. It was filmed quite a long time ago, and a lot of improvements have been made since then, but it gives an example of what unsafe conditions look like in terms of fire and building safety.

Can you identify how the manager of this factory addressed the issues?

Now imagine you are a manager of a garment factory.

Choose 3 of the occupational hazards listed in this lesson and write down ideas and possible solutions on how the harms and illnesses caused by these hazards could be avoided and prevented.

You can work alone, in pairs, or in a group. When you're done, share and discuss it with others.



Reflection

Have you known of all these diseases that workers can develop just by doing their job?

Can you see a difference between occupational hazards and the diseases and problems that are the consequences of exploitation?

Could you imagine yourself working in a garment factory, where you are surrounded by such dangers? **Unfortunately, for many people who do these jobs, it's the only thing they can do in their part of the world to earn their bread and provide for their families.**

How did you feel during the lesson learning about these health issues?

Would you change something about the fashion value chain if you could?

Can you think of ways we, as individuals and as society can help the people who make our clothes and get sick as a result?

Do you consider it acceptable that so many people suffer in this industry?

Do you think that if more and more people, who are consumers, know about these problems and cases, something will change about it?

Would you be willing to talk to others about it?

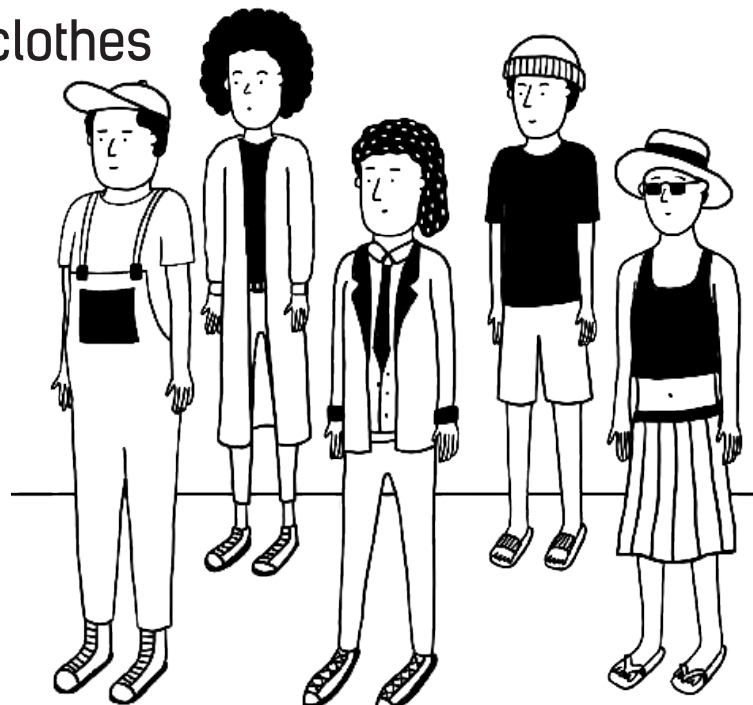
What would be a sentence or a few sentences how you would summarise this world-wide issue?

Some possible answers to what can be done to help improve the global situation

- educating children to read and write
- educating young people for mechanical jobs and engineering
- help families with low income through tuition fees for their kids
- promote healthy, nutritious eating with food aid/ donations

As consumers, we can

- opt for transparent fashion brands
- choose ethically and environmentally friendly produced fabrics
- go for naturally or ecologically dyed textiles
- swap clothes with friends
- buy at second hand shops
- mend, repair and remake our clothes
- try making our own clothes



Resources

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Reliefweb. New project will tackle malnutrition amongst Bangladeshi garment workers. 2014. Available at: <https://reliefweb.int/report/bangladesh/new-project-will-tackle-malnutrition-amongst-bangladeshi-garment-workers>

Attachments

https://www.youtube.com/watch?v=gDI433m_k34

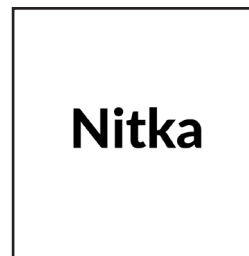
<https://www.youtube.com/watch?v=hFzKeGqyvCU&t=51s>



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