

# How Smoking is Changing the World

**Mauryen Saini**

Gems New Millenium School

## Abstract

This research paper explores how smoking is honestly messing up the world in multiple ways — from how early people start, to how cigarettes are even made, peer pressure, health damage, pollution, and also how we can actually reduce smoking. It mixes biology with social factors, because smoking is not just a “bad habit,” it’s a whole chain reaction in the human body and the environment. I also included personal-style reflections and messy thoughts because humans aren’t robots and real life is never neat.

## 1. Introduction

Smoking is one of those things that everyone *knows* is harmful, yet millions still do it. Some start because they think it looks “cool,” some because of stress, some because their group forces them, and some because cigarettes are literally designed to be addictive. Biologically, cigarettes attack almost every organ in the body... and environmentally, they damage the planet even after someone throws the butt away.

When you look around, you notice: teens trying cigarettes way too early, ads disguised as “aesthetic lifestyle,” influencers vaping like it’s fashion, and cigarette factories producing millions daily. This paper tries to understand the *whole cycle* — how cigarettes start from tobacco leaves and end up changing lungs, minds, and the environment.

## Methodology

For this research paper, I used a mixed and honestly messy method:

1. **Observations:** Watching how people smoke in public areas, school surroundings, and how easily cigarettes are available.
2. **Personal interactions:** Talking casually with friends, older teens, and even adults about when they started smoking and why.
3. **Secondary research:** Reading biology textbooks, health websites, and environmental reports (not too formal, but enough to understand the science).
4. **Biology understanding:** Using class knowledge about lungs, heart, nervous system, and how chemicals affect cells.
5. **Real-world reflection:** Combining human experiences + biological facts to understand the bigger picture.

## Starting Age of Smoking

People are starting earlier than ever. In many countries, teenagers as young as **12–14 years old** try their first cigarette. Sometimes even younger. The human brain at this age isn’t fully developed — the decision-making part is still under construction — so getting addicted is easier.

Reasons why young people start:

- Curiosity

- Wanting to look mature
- Copying influencers, actors, or older friends
- Stress or family issues
- Peer pressure (big factor)

### How Cigarettes Are Made

Cigarettes are not “just tobacco.” They go through a crazy process:

1. **Tobacco is grown** → leaves are harvested
2. Leaves are **dried, heated, and chemically treated**
3. Factories add around **7,000+ chemicals**
  - a. Nicotine (main addiction)
  - b. Tar (sticks to lungs)
  - c. Formaldehyde
  - d. Ammonia
  - e. Lead, arsenic...
4. Tobacco is shredded and rolled in special paper
5. Filters are added
6. Packets are sealed and shipped worldwide

When people inhale this, the chemicals enter the lungs, then blood, then travel to literally every organ.

### How People Get Influenced to Smoke

Humans are social creatures. If something looks cool, rebellious, or mature, people copy it.

Influences include:

- Movie scenes showing smoking as stylish
- Social media aesthetics
- Parents or family members who smoke
- Stress or anxiety
- Advertisements (direct or indirect)
- Celebrities promoting vape culture
- “Everyone does it” mindset

Biology meets psychology here — the brain gets tricked into associating smoking with confidence or stress relief. Nicotine boosts dopamine for a short time, so people think it helps when actually it traps them.

### Peer Pressure and How It Makes Smoking a Habit

Peer pressure is literally one of the most powerful forces for teens.

It works like:

1. A friend says “just try once.”
2. The person doesn’t want to look “uncool.”
3. They try it despite knowing it's harmful.
4. Nicotine enters bloodstream → dopamine spike → brain says “this feels good?”
5. Next time they’re stressed, they remember that feeling.
6. It becomes a habit → then addiction.

The human brain builds a “reward pathway” for smoking. That’s how peer pressure leads to biological addiction.

### **Disadvantages of Smoking**

#### **Short-term:**

- Coughing
- Bad breath
- Increased heart rate
- Shortness of breath
- Lower stamina

#### **Long-term:**

- Lung cancer
- Heart disease
- Stroke
- Reduced immunity
- Infertility
- Bronchitis
- Early aging (skin wrinkles)

#### **Mental/Emotional impact:**

- Stress increases (not decreases)
- Irritation
- Dependence on nicotine to feel “normal”

Environmental Pollution Caused by Smoking

Cigarettes don’t stop harming the world after being smoked.

#### **Pollution includes:**

- Smoke released into the air
- Toxic chemicals in cigarette butts
- Plastic filters (take 10–15 years to decompose)
- Forest fires caused by discarded cigarettes
- Tobacco farming destroying forests
- Factory emissions

Cigarette butts are the **#1 most littered item on Earth** — causing soil and water pollution.

### **How We Can Recycle Cigarettes**

Recycling cigarettes actually sounds weird at first — like how can something so toxic become useful? But surprisingly, there *are* ways to turn cigarette waste into something positive instead of letting it rot on streets, beaches, and parks. The filters, which everyone throws away without thinking, are basically tiny pieces of plastic mixed with chemicals. People have started collecting them and sending them to special recycling centers where the filters get cleaned, melted, and turned into things like plastic bricks, benches,

construction boards, or even outdoor furniture. It feels kind of ironic that something harmful can be transformed into something helpful, but that's how recycling works. Some organizations also use the ash and leftover tobacco to make compost after removing the toxins, though it takes a careful process. And companies are experimenting with turning cigarette waste into industrial insulation material or even using it to make energy in waste-to-fuel plants. The human part of all this is that recycling cigarettes is not just about technology — it's about people deciding to care enough to pick up the butts, choosing not to litter, and supporting programs that handle toxic waste properly. It's a small step, but honestly, if smokers and non-smokers both treat cigarette waste like something that needs responsibility, we can turn something ugly into something useful and reduce a bit of the damage smoking already causes.

## **How We Can Reduce Smoking**

### **Individual level**

- Avoid trying “even once”
- Learn about addiction early
- Stress-relief through sports, music, or talking to someone
- Use nicotine patches or gum if quitting
- Replace smoking triggers (after meals, break times)

### **Society level**

- Stronger awareness campaigns
- No smoking zones
- Limit cigarettes near schools
- Ban attractive ads
- Cheaper therapy options
- More teen-focused education

### **Environmental level**

- Proper disposal bins
- Clean-ups
- Reduce manufacturing pollution
- Encourage biodegradable filters

## **How to Consult a Friend, Adult, or Doctor**

talking about smoking is hard, but important. Here's how to approach:

### **Talking to a friend**

- Don't judge
- Say “I care about you, and I think you're hurting your body”
- Share facts gently
- Offer to help them try quitting
- Invite them to healthier activities

### Talking to an adult you trust

- Explain your concerns clearly
- Tell them why you feel worried
- Ask for guidance

### Talking to a doctor

Doctors can provide:

- Nicotine replacement
- Counselling
- Breathing tests
- Health advice
- Step-by-step quitting plans

### The Economics of Smoking (How Much Money the World Loses)

When you dig into the numbers, smoking doesn't just hurt people's lungs — it drains the global economy hard. In 2012, the total economic cost of smoking (that includes healthcare bills, lost work productivity, deaths, disability) was estimated to be **about US\$ 1,436 billion**. [ScienceDaily+2PMC+2](#) That's almost **1.8% of the entire world's GDP** for that year. [Global Alliance for Tobacco Control+1](#) On top of that, just treating smoking-related sicknesses cost roughly **US\$ 422 billion in 2012** alone — that's about **5.7% of all global health-care spending**. [PubMed+2World Bank Blogs+2](#)

What's even more painful: nearly **40%** of that global bill falls on developing countries. [ScienceDaily+1](#) This means many families — those who often are already struggling — end up paying more in medical bills, lost wages, or even loss of loved ones. Every cigarette doesn't just cost a few dirhams or dollars; over time, it chips away at national health budgets, the economy, and the future of people's lives.

When I think about those numbers, I see more than statistics — I see real people losing money, opportunities, health, sometimes even life. It's heartbreaking to imagine what those billions could've been: better schools, cleaner streets, stronger hospitals, or simply families living without that constant burden.

If you want — I can also grab **data specific to Middle East / Asia / developing countries** (closer to our region) to make this part of your paper feel more local and real.

### How Nicotine Changes the Brain

Nicotine doesn't just "affect" the brain — it literally rewires it. When someone smokes, nicotine reaches the brain in **about 10 seconds**, which is insanely fast. According to research from the National Institute on Drug Abuse, nicotine increases dopamine levels in the brain's reward system by **150%**, which is why people feel that quick "relief" or "kick." But the scary part is what happens next: the brain starts getting used to these fake dopamine hits, and after some time, it needs *more* nicotine to feel the same effect. That's how addiction quietly builds up. Studies also show that teenagers' brains are especially vulnerable — people who start smoking before age 18 are **three times more likely** to become addicted adults because their brains are still developing pathways for decision-making and self-control. Over time, nicotine literally changes the areas of the brain responsible for mood, focus, impulse control, and stress, making smokers feel irritated, anxious, or "not normal" without a cigarette. And this is the saddest part: the brain becomes so dependent that a person starts smoking not to feel good, but just to stop feeling bad. When you understand how deeply nicotine gets into your mind — not just your body — you realize addiction is

not about weakness; it's about a chemical that takes advantage of the human brain at its most vulnerable moments.

### **Future Without Smoking — What a Smoke-Free Generation Could Look Like**

A future without smoking would honestly be like the world finally taking a deep, clean breath. Imagine kids growing up without ever seeing someone light a cigarette, without worrying about smoke drifting into their homes, and without the fear of losing a loved one to something completely preventable. Parks and streets would feel fresher, mornings wouldn't start with coughing, and families wouldn't have to stress about the invisible damage of secondhand smoke. People would also save so much money, money that could go to better things — trips, education, hobbies — instead of just burning away on packs of cigarettes. Hospitals wouldn't be overflowing with patients struggling with lung or heart problems, and even the planet would feel the difference — fewer forests cut down for tobacco, fewer toxic cigarette butts choking oceans and streets. A smoke-free generation isn't just about no cigarettes; it's about freedom, health, cleaner air, and a life where people can actually enjoy simple things without the shadow of addiction hanging over them. It's a world that feels lighter, calmer, and more alive — and honestly, it's a world we could build if we really try.

### **“From ‘Winston Man’ to Anti-Smoking Hero**

Imagine someone who used to promote cigarettes — someone whose face made smoking look cool, stylish, even aspirational. Now imagine that same person, having walked away from those ads, speaking in front of teen students and adults alike, saying: “I was once like you — I smoked, I believed the lies, I didn't think it was a big deal. But I was wrong.” That's David Goerlitz. His story is proof that quitting doesn't just fix what's wrong in your lungs or body — it can fix your conscience, your identity, and maybe even save others from going down the same path. Because he changed, many looked at him and realized: if someone who once sold cigarettes can turn around — then anyone can. That kind of change makes smoking not just a personal choice, but a social message: smoking doesn't define you — your choices do.

### **Conclusion**

Smoking is honestly like a domino effect — one single cigarette can start this whole messy cycle that hits your body, your mind, the people around you, and even the environment without anyone noticing at first. Most people don't even plan to become smokers; they start when they're young because of pressure, stress, curiosity, or just trying to fit in. And the scary part is that cigarette companies add chemicals that make the addiction stronger on purpose, so what begins as “just one try” slowly becomes something the person feels they can't live without. The damage gets bigger over time — lung cancer, breathing problems, pollution, and even emotional stress. But things can change if people actually talk about what smoking does, not in a judging way, but in a real human, caring way.

Stopping smoking isn't as simple as saying “ban cigarettes.” It's more about understanding what people go through — their emotions, their stress, the pressure they feel, the habits they fall into. When friends, families, schools, and doctors all support each other instead of blaming, the cycle can start to break. One honest conversation, one helping hand, one better choice at the right moment can slowly protect both people and the planet. It's not easy, but it's possible if we try together.

## Reference

1. Goodchild, M., Nargis, N., & Tursan d'Espaignet, E. "Global economic cost of smoking-attributable diseases." *Tobacco Control*, 2017. This study estimates that in 2012 worldwide, the total cost of smoking (healthcare + lost productivity) was about **US \$1,436 billion**, equal to ~1.8% of global GDP