# Health risks of makeup research paper

Business, Customers



## Introduction

Panter-Brake (202) asserts that most people use beauty products with the assumption that these products have undergone thorough testing to ensure their safety before they reach the consumers. The assumption comes because the government is known to regulate most consumer products such as food, water, among others. Therefore, people expect that FDA ensures the health and safety in the cosmetic industry so as to protect consumers. Unfortunately, little power has been given to FDA in regulating cosmetics' ingredients. The people who govern cosmetic industry are responsible for ensuring safety of the beauty products. Several studies reveal that consumer safety is being overlooked because most beauty products contain chemical health hazards. In fact, some products were found to contain ingredients that cause cancer such as alpha hydroxyl acids. Other cosmetics contained ingredients that interfere with the body hormones. It can, therefore, be argued that people who apply makeup risk having health problems in the future.

Anton (81) says that cosmetic industry is one of the most profitable industries in the world. Make up refers to colored beauty products that alter the appearance of an individual. Examples include lip stick, powders, hair gels, eye shadows, facial makeup, among others. Samuel, Fitzgerald (122). They aim at promoting an individual's attractiveness. Cosmetic industries spend a lot of money in advertising their products on TV, radio, magazines, and the internet. They also use different promotional strategies; hence attracting customers. It is a very competitive industry because several

substitutes are available in the market. This paper discusses the chemicals found in makeup that could lead to health risks. The paper also gives recommendations and alternative beauty products that do not contain harmful chemicals.

#### **Discussion**

All makeup products contain considerable bacteria. This means that the manufacturers must add preservatives to the products. A commonly used preservative is Parabens, which is a synthetic chemical that is toxic in nature. Jones (23) argues that many consumers think that the preservatives help in protecting the users from bacteria. However, the preservatives' aim is to protect the product from expiring fast. The main aim, therefore, is to extend the makeup's shelf life. Toxic metals have also been discovered in mascara, lotion, face powder, clown makeup, eye shadow and moisturizers. These toxics are associated with side effects among them mouth sores, cancer, skin rashes, brain disorders, nausea, still births, and violent behavior. The toxics have been discussed below:

# Mercury

FDA allows the use of mercury in eye makeup, but to a specified concentration of 65 ppm (Epstein 103). it has now come to people's knowledge that mercury can bring contamination in dental amalgams, fish and vaccines. Mercury thermometers are also being done away with in order to minimize health risks. Consumers have also been warned against the use of makeup that contains mercury. Mercury is easily absorbed by the skin leading to its accumulation in the body. Mercury also causes irritation of the

skin, allergies, and neurotoxicity problems. Most eye makeup manufacturers use Phyenl mercuric acetate as a preservative (Lintner 69)

## Bronopol and formal dehyde ingredients.

Bronopol is a chemical, mainly used in cosmetics such as mascara. Laboratory research has proved that bronopol, given at high concentration than that used in makeup leads to death of laboratory animals. This is, therefore, a harmful chemical. Almost all makeup products comprise of formaldehyde-releasing ingredients. The ingredients increases chances of getting asthma, heart palpitations, allergies, respiratory problems, and skin reactions. Exposure to formaldehyde can cause cancer, depression, dizziness, join pains, headaches, and immune dysfunction. An example of a formaldehyde compound is hexamethylenetetramine.

## Coal tar

According to Jones (29), several studies have shown that over 70% of dye products contain products extracted from coal tar. Using hair dye for a long time has been proved to increase chances of getting bladder cancer, multiple myeloma, and lymphoma that is not Hodgkin. In the year 2005, USC School of medicine conducted a research to determine whether hair dyes contribute to bladder cancer (Baran 620). The research revealed that those women, who used hair dyes at least two times in a month, had double chances of getting bladder cancer. According to the study, it was estimated that 20% of bladder cancer cases in California was as a result of using hair dye permanently. National Cancer Institute, in 2000, found that hair dye has also been linked to Lymphoma, which is not Hodgkin (Baran 621). FDA is yet

to prohibit the use of coal tar in makeup, but it advises that people should reduce the rate at which they use hair dyes in order to reduce chances of getting cancer.

## **Nitrosamines**

These include carcinogenic compounds that the skin can absorb. Most cosmetic ingredients contain by products that contain nitrosamines.

Chemical reactions of the makeup ingredients give rise to these by products. The makeup ingredients that release these by products include

Triethanollamine, nitropropane, lauryl Sarcosine, formaldehyde, Quaternium, among others. However, these by products can be blocked by agents such as vitamin C. vitamin E can also be used as a blocking agent, to help in reduce the bad nitrosamine effects. Some manufacturers of makeup use these agents; hence reducing nitrosamines, which the skin can easily absorb.

#### Petrolatum

This is mineral oil found in lip-gloss, baby oils, makeup removers, among other cosmetics. This mineral has been linked to causing pores on the skin. Another petroleum product used in makeup industries is Propylene Glycol. Baker (51) says that he ingredient is mainly used in industries as brake fluid. In some people, it causes allergies and other reactions due to toxics. Important to note is that many manufacturers claim that the product is natural. However, it has been found to penetrate through the skin very quickly, and the Environmental Protection Agency requires that those employees, who deal with the chemical, wear protective attire such as overalls and gloves. MSDS warns that contact of the chemical with the skin

can lead to kidney and brain abnormalities (Jones 18). Makeups that stick on the body contain this chemical in concentrations higher than recommended. This chemical can also cause liver abnormalities.

# **Sodium Lauryl Sulfate**

Thousands of makeup products use this chemical as a preservative. The chemical is used in industries as an agent for cleansing. It has been proved that this chemical easily penetrates through the skin even when it is used at low concentrations. Sodium Lauryl Sulfate is extracted from coconut, and this makes people assume that the product is natural. However, manufacturers mix it with Chlosulforic acid and other chemicals, which are likely to contaminate it; hence making it harmful because the resulting mixture can contain nitrosamines. Use of the ingredient has been found to cause eye damage. Residuals have also been found in lungs, liver and other body parts, following skin contact with SLS (Patri and Silano 61). This destroys the immune system of an individual. The protein found in the product has also been found to cause inflammation to the skin.

# Fragrance chemicals

Most makeup manufactures add these chemicals to their products. Exposure to these chemical results in depression and irritability. The chemical has also been found to cause other behavioral problems such as hyperactivity. An individual who has been exposed to Fragrance chemicals can be unable to cope well with other people. Some people have also been found to have problems with their nervous system as a result of this exposure. Most of these chemicals enter the body through inhaling. Others get into the body

through the skin when an individual comes into contact with them, while others get into the body through the process of ingestion. They affect mainly the brain. Fragrance can also trigger asthma and skin allergies in some individuals. (James 347).

People need to take care of their skin. Alcohols, found in makeup, change the PH of the skin. Alcohols, together with solvents eat away the skin, which could easily lead to infections. The chemicals could also lead to wrinkles, red veins, rashes, and several other spots. Makeup users need to understand that the skin needs the same care given to the heart. Some Chinese doctors refer to the skin as the third lung because it functions as the lungs. This is so because the skin is used for blood circulation and breathing.

Initially, people believed that the skin was not permeable. Studies have, however, proved that the skin can easily absorb chemicals, which could be harmful to our bodies. Chemicals, which are toxic, used in makeup, can also get absorbed through the same process. The toxic chemicals further go into the blood stream causing the problems discussed above. Research has shown that the skin has two important functions. It can absorb and it releases toxic substances. It is the largest organ of the body, and this shows how important the organ is in all living things. People are advised to visit saunas frequently so that the toxics get released.

It would be important to understand the skin and its function before going for any type of makeup. The skin is comprised of three layers namely epidermis, dermis, and sub dermis. The upper most layer is the dermis, containing nerve endings. This layer is shed off frequently and replaced immediately. The dermis is the middle layer that contains several blood vessels, oil glands, lymph vessels, hair follicles, just to mention a few. The third layer acts as a cushion for the other layers, and as a protective caution for hair and nails.

Complex oil, named sebum, is released on the skin. Epstein and Fitzgerald (9) points out that this oil helps to slow down evaporation through the skin. It also helps to prevent moisture penetration through the skin. When the skin gets exposed to wind, and cold conditions, it tends to dry up. Creams made from mineral oils can be helpful to prevent the drying effect. However, these creams can affect the natural process through which the skin moisturizes itself after being used for a long time. The skin also gets affected by collagen amino acids, sodium lactate, and other solvents such as sodium pyrolidone, found in most makeup. Toxic chemicals add up on the skin preventing the skin from carrying out its natural functions. A survey, conducted by EWG, revealed that American adults in America use make up products daily that contain more than 100 chemical ingredients (Baker 316). The survey also revealed that the use of care products exposes 12. 2 million people to known human carcinogens. Women, totaling to 4. 3 million, get exposed to makeup ingredients that could lead to infertility or problems of fetal development. The commonly used carcinogens in makeup, and other cosmetics, according to the study, include nitrosamines ethyle, acrylamide, dioxide, formaldehyde hydroquinone, PAHs, and 1. 4- dioxane. The study further revealed that women apply makeup more than their male counterparts (Baran 620).

## Makeup labels

Cosmetics industries are required by law to label ingredients of a product in the order of predominance, and in such a manner that a normal consumer can easily read and understand. However, the labels used by the manufacturers are hard to read. Very small fonts are used and scientific terms of the ingredients are used making it difficult for a lay man to understand. The terms are only known to scientists, manufacturers, or chemists. During the study, EWG found that the manufacturers do not label all the ingredients. Misspellings also dominated in the labels. Instead of using the full name of the ingredients, most manufacturers prefer using synonyms. Mislabeling was also discovered in a number of products. Products sold online also failed to disclose product ingredients. This means that most consumers do not understand what ingredients have been used in manufacturing the makeup, and, therefore, do not understand the dangers they risk in using the products. (Panter-Brick 190).

# Conclusion

Makeup users face health risk because cosmetics are never heavily regulated unlike many other products in the market. Drugs, on the other hand, are strictly regulated yet they use almost similar ingredients. Most makeup, which is similar to drugs, penetrates through the skin. Majority of makeup factories use vast financial resources in advertising their products and the ingredients used in making those products. However, advertisers do not take time to explain to the consumers that the beauty products contain preservatives that release formaldehyde and carcinogens, which can be harmful when they get into our bodies either through inhaling or skin

contact. FDA understands that makeup companies do not keep records of the safety tests that they carry out on the products they deal with. Some companies even refuse to disclose such information when requested to disclose.

Toxic chemicals in the cosmetics as listed in the research can cause cancer and genetic damage. Biological mutation has also been recorded to occur as a result of toxic chemicals found in makeup. Unfortunately, cosmetic industry has been left to regulate itself; hence assuring the consumers that the products, available in the market, are safe for use. The industries convince the consumers that all ingredients get tested before a product is released for sale. Beauty products do not carry warning signs and the industrial spokesman defends the manufacturers arguing that companies are not allowed to sell products, which are unsafe. Important to note is that putting warning signs on makeup products is optional. Consumers get shocked when they realize that the cosmetic products they use do not undergo testing to ensure their safety. Several organizations are coming out openly, demanding that makeup consumers be protected from using products that contain toxic ingredients.

### **Works Cited**

Panter-Brick, Catherine. Health, Risk, and Adversity. New York: Berghahn

Books, Print. 2010: 189-229

Patri, Gianfranco, and V. Silano, Council of Europe. Committee of Experts on Cosmetic Products, Robert Anton. Plants in Cosmetics: Potentially harmful components. Strasbourg Cedex: Council of Europe, Print. 2006.: 57-92

Lintner, Karl. Global Regulatory Issues for the Cosmetics Industry. New York:

William Andrew, Print. 2009: 38-73

James, Kat. The Truth About Beauty: Transform Your Looks And Your Life
From The Inside Out. New York: Simon and Schuster, Print. 2003: 312-368
Baker, Nena. The Body Toxic: How the Hazardous Chemistry of Everyday
Things Threatens Our Health and Well-Being. New York: Farrar, Straus and
Giroux, Print. 2009: 46-58

Baran, Robert. Textbook of Cosmetic Dermatology. New York: Taylor & Francis, Print. 2005: 617-630

Jones, Robert. Makeup Makeovers: Expert Secrets for Stunning
Transformations. Canada: Lions Bay: Fair Winds. Print. 2008: 14-29
Epstein, Samuel S., and Randall, Fitzgerald. Toxic Beauty: How Cosmetics and Personal-Care Products Endanger Your Health and What You Can Do
About It. Dallas, Texas: BenBella Books, Print. 2009: 102-165