

# Usage of cosmetics and its adverse reactions: A Case Study on University Female Students Community

Farwin SJF<sup>1</sup> & Ruzaik F<sup>2</sup>

### Abstract

Use of cosmetics is considered a common practice in the world today. Global social change have changed people's consumption patterns. Thus, cosmetics are one of the most required commodities among young women today. Actually, the use of cosmetics is determined by social and ecological factors, and they have the potential to directly or indirectly affect people's health. Accordingly, today a large number of young women are suffering from various health disorders. The main reason is that they never think about the cosmetics related side effects because of their positive view of these products. So this study mainly focused on evaluating the adverse effects of cosmetics. All the primary and secondary data used in this study were collected through structured quiz interviews and observations and the data were analysed using qualitative and quantitative methods employing Excel software.

Cosmetics usage is more prevalent among young women (96%) studying at the Universities. This study shows that, they apply cosmetics mixed with chemicals to various body parts such as hair, face, and body, which have sometimes caused health disorders. The adverse effects observed were allergic reaction, irritations, wounds, pimples, and skin burning. its' continues use has also been found to cause serious health disorders such as cancer and infertility. Similarly, knowledge on green beauty products among university students is insufficient. Further, it has been found that there is no correlation between the use of cosmetics and the level of education.

**Keywords:** *cosmetics, consequence, ecological factors, health disorders, green cosmetic.* 

<sup>&</sup>lt;sup>1</sup>Independent researcher, Department of Geography, University of Colombo <sup>2</sup>Department of Geography, university of Colombo, fareena@geo.cmb.ac.lk

## Introduction

Cosmetics is one of the primary aspect of the human daily life style in all the generations and it has spread among the people for numerous uses and purposes (Saudi Food and Drug Authority, 2008). The field of cosmetics have expanded as the production of cosmetics has increased not only for use of each part of body but also for different seasons as well. Cosmetics play a significant role in increasing attractiveness because they are a part to enhance facial symmetry. Women are more likely to be psychologically in need of maintaining their beauty and attractiveness. The cosmetics industry does have significant impact on college women today(Britton, 2012). Traditionally cosmetics have been used by women to control their physical appearance and presumably their physical attractiveness (Vanessa et al., 2011). It is supposed that the character of a person depends on his or her local appearance too. The agreement that they need to put their best self forward is more normal among ladies than men. That is the reason today the enthusiasm of ladies in utilizing beautifiers is unfathomable.

Cosmetics products have been generally defined as "articles intended to be applied to the human body by being rubbed, poured, sprinkled, or sprayed for cleansing, promoting attracting, beautifying, or altering the appearance" (FADCA-The Federal Food Drug and Cosmetic). Khan et al. (2019) defined skin care products or cosmetic as mixtures of synthetic or natural chemical compounds used to improve the appearance or smell of the body. Based on these definitions products such as skin creams lotions, perfumes lipsticks, nail polishes, soap, shampoos, hair colours, and toothpastes fall under the category of cosmetics. Three factors such as production, quality and low side effect have been identified as the major influencing factors when purchasing cosmetics.

The comprehension of self-stylish excellence is always there in ladies from the early eras. However, ancient ladies made themselves beautiful by utilizing the materials in the home or from natural environmental resources. Yet, today, the utilization of beauty care products is not quite the same as the ancient times. This implies that beautifying agents blended in with synthetic substances that are sold in the market today are generally devoured, aside from home use items. It is believed that such products have a reasonable degree of safety and tolerability (Lucca et al.,2020). Recent studies revaluated that exposure to various chemical substances present in cosmetics poses a health risk. Gender, age, allergies to medications and food, family history of allergy, mixing cosmetics, and frequent switching of cosmetic brands are being associated with adverse effects(Lucca et al.,2020).Some of the cosmetic ingredients are emerging pollutants too.They reach the environment in multiple ways, often through water, posing health risks to marine and freshwater ecosystems and to humans (Pereira & Pereira,2018). The examination depends on the commonness of contrasts in the utilization of beautifying agents among ladies to survey the pervasiveness of corrective use among youthful grown-ups.

### **Research problem**

Cosmetics has become a need of the society but cosmetics which make us beautiful temporarily contain number of chemicals and lead to various kinds of side effects on long term use. Despite the fact that these cosmetics make us look good, in the end they are going to leave a negative effect as well. Today most teenage girls are increasingly using infectious chemicals that are framed as cosmetics to alter or enhance their natural appearance. The users forget the negative effects caused by the cosmetics. Often cosmetics are made up of combinations of different types of chemicals that can have different effects on the human body. For example, chemicals are found in cosmetics, such as parables, dioxin, polyethylene could lead to cancer when it enters the body. Cosmetics are seen as products that affect the physical health and healthy life of women by causing effects such as infertility and female gland dysfunctions. Consumption of these cosmetics have a high rate of use in young women. They do not consider the consequences of using cosmetics and the awareness among them about the effects of cosmetic use is very low. Due to this unawareness, the use of cosmetics is higher among them. In this context, this study focuses on raising explanation on the awarenessof the usage of cosmatics among the University students with the research questions such as.

- what are the beauty products most commonly used by young women?
- what are the adverse effects of cosmetics? and
- are there awareness among young women about the effects of cosmetics use?

## **Research objective**

- To identify the most consumed beauty products by young women studying in Universities
- To evaluate the adverse effects of cosmetics as identified by the University students

## Methodology

This study was planned as a descriptive study based primarily on qualitative data as well as simple quantitative data to achieve the study objectives. The essential data required for the study are collected through the primary data, which is obtained through the structured questionnaire and the interview.



Data was collected from universities located in different parts of the country .The Universities selected included University of Jaffna from Northern province, South Eastern University of Sri Lanka from Eastern province, University of Peradeniya from Central province, University of Colombo from Western province and University of Ruhuna from Southern province as representing several geographical areas. A sample of 40 female students were selected by simple random sampling method from each university and 200 were surveyed from all the 5 universities. In addition 25 female students were interviewed over the phone. The questionnaire used in the study mainly focused on four major areas;

- 1.demographic factors of participants.
- 2.utilization of cosmetics.
- 3.perception in effects of using cosmetics
- 4.awareness of green cosmetics.

Journal of Institute of Human Resource Advancement University of Colombo

Further, the secondary data required for the study and the research articles related to the research topic, such as texts and journals were collected and subjected to quantitative analysis by Excel and all the data were dated and displayed.

#### **Results and Discussions**

My survey is about the usage of cosmetics with their adverse reactions among female students from the universities in Sri Lanka. Beauty products used for cosmetic purposes can create a bad condition to human health because they contain a highly toxic metal. So nowadays the use of natural cosmetics has declined and also the use of cosmetics containing such Chemicals has increased, on the other hand, its impact has been prominent in human health.

#### Analysis of the usage of cosmetic products

If we look at the trend of use of cosmetics among young women based on the research data collected based on the samples taken, the use of cosmetics among women can be viewed as a common thing. 96 % percent of those surveyed were found to be using cosmetics. Thus the extent to which these products are used at least once a day is found to be more prevalent among young women. Therefore, research has shown that the use of cosmetics among them has become more prevalent on daily basis.

Body part	Cosmetics
Hair	Hair Oil ,Shampoo ,Conditioner, Henna
Face	Cream, Face Powder, Oil, Gel, Foundation
Skin	Skin Powder, Lotion, Skin Toner, Skin Cream, Cleanser
Eye	Eyeliner ,Mascara ,Eye Shadow ,Kajal ,Eyebrow Pencils
Nail	Nail Lacquers, Nail Bleaches
Lip	Lipstick ,Lip Liner ,Lip Balms

 Table 1 Usage of cosmetic products

Source: Field survey 2020/2021

Research has shown that cream, spray, lotion, shampoo, and gel are some of the most commonly used cosmetics in everyday life, especially Mascara, eyeliner, powder, and cream which are the most common cosmetics used by young women on a daily basis. This Study have also shown that the face, body, hands, feet, and eyes are www.ihra.cmb.ac.lk 100 journal@ihra.cmb.ac.lk

#### the most common part which were considered for cosmetic purposes.



Figure 1: Purposes of Using cosmetics

Sales sites and advertisements are seen as the principal medium in bringing in, and women are consuming it based on their instruction to enhance their appearance. Thus the effects of cosmetics are not highlighted during consumption but only its benefits are highlighted.

In addition, the generalized conclusion of the study is that while women consume beauty products while the quality, the company pays attention to price content, etc. They consume products based on high quality because they feel that the consequences are much lesser when the quality is right.



Figure 2: Purchasing cosmetics

The main reason for the use of cosmetics is that they have the attitude that the use of such cosmetics helps to show that they are beautiful and that their appearance is remarkable. These products are harmful to human health when used in large amounts for various reasons. Although the cost of beauty products is high among young women, 71.4% of them use it with awareness about its effects, i.e. their safety. It has revealed that they are careful in consuming eco-friendly beauty products.

### Estimate the adverse effects of using cosmetics

However, research has shown that in several cases the effects of such devices are unavoidable. So considering their report, most adverse effects were manifested as skin irritation, skin burning, headaches, and eye irritation.

Body part	Effects
Hair	Hair Damage, Hair Loss, Headache.
Face	Allergies, Pimples, Redness
Skin	Skin Irritation, Skin Burning, Skin Atrophy
Еуе	Eye Irritation. Eye Redness, Dry Eye
Nail	Brittle Nails, Allergic Reactions
Lip	Wounds, Skin Allergies, Chapping On The Lips

 Table 2 Adverse effects of using cosmetics

Source: Field survey 2020/2021

According to the data obtained accordingly by beauty products, it is clear that skin diseases can occur. They point out that chemicals added to cosmetics that brighten the skin can cause skin irritation and skin cancer. Similarly, eye damage is also an adverse effect caused by beauty products. Some cosmetics used for the eyes and hair can also cause eye diseases and infections. For example, when applying shampoo to the hair, it can indirectly harm the eyes. The study also found that such beauty products can alter the appearance of the skin. It has also been reported that overuse of cosmetics can sometimes cause wrinkles on the skin and cause aging. Similarly, this study's samples explain that these devices cause inflammation. For example, overuse of shampoo and conditioner can sometimes lead to allergies.

Therefore, based on the modern sphere of life, the widespread use of cosmetics among young women has been shown to have the potential to

directly or indirectly cause various effects on human health. Ignorance of users is the main reason for such effects on human health.

#### **Consumer perception in green cosmetics**

Green cosmetic are defined as products made from natural molecules in the environment. Consumers concern about their health so, healthy life style is changing their mind set towards the eco-friendly cosmetics. According to the data collection the awareness of green cosmetics is low among young women of that 40% are aware of it, 60% do not know about green cosmetics. The people were aware that there is a difference between green cosmetics and chemical cosmetics. They have realized that green cosmetics provide them better health and a green environment around them. They feel that green cosmetics are safe to use without any side effects. So health consciousness and environmental concern are the main reasons to motivate the consumers towards green cosmetics.



Figure 3: Awareness about harmfull of using cosmetics

The study population wants to be aware of their health and the environment, so they want to know more about green cosmetics and consume them. Based on that 84% of women would like to buy green cosmetics and 17% are not sure about it. They neither like it nor do not like it. Therefore, young women need more awareness about green cosmetics.

### **Conclusion & Recommendation**

The changing sphere of life may have improved the status, quality, and behaviour of women in society, but this change has also affected

the consumption spheres of women. The attitude of seeking to beautify oneself in the indoor and outdoor environment is seen as one of the things that attracts young women in relation to the consumption of cosmetics. So nowadays most people go for synthetic cosmetics.

According to the study, young women in universities use these products on many parts of the body, such as the face, hands, feet, hair, etc. to address their needs. Because of the combination of chemicals in the products marketed today, Cosmetics used for short-term purposes are more likely to have long-and short-term health problems. The main ingredients in cosmetics are a kind of combination of Lead, Chromium, Nickel, Mercury, Arsenic, Cadmium, etc. so their continued use can cause to cancers kidney disorders, diabetes, high blood pressure and many other health disorders.

Therefor lack of knowledge about the ingredients that are included in the cosmetic products is the reason to face such a health hazards. Because the main purpose of young women is to highlight their appearance by using various the products. The effects may be due to a lack of awareness among young women today and optimism about the consumption and use of products. To avoid these effects it is best to use natural sources to get a healthy physique and heal and beautify your skin naturally. Getting natural beauty in that way is not a very difficult task; with the products we use every day at home, we can easily achieve natural beauty without spending any money. Honey, Turmeric, Aloe-vere, Neem leaves, Curry leaves, Oats, Potatoes, Tomatoes, Lemon are some kind of home natural beauty resources. The side effects of taking these products to beautify our body are minimal thus, awareness on vulnerabilities should be created and knowledge on green cosmetics should be developed. As well as when implementing appropriate programs or educating young women on this they can protect their health from the repercussions of cosmetics. Therefore, it is important to pay attention to their hygiene and the environment when using cosmetics.

## References

Banez, V.A., Hartman, P., Diehl, S., & Terlutter, R. (2011). Women Satisfaction With Cosmetics Brands: The Role of Dissatisfaction and Hedonic Brand Benefits. *Inventi Journals (Pvt) Ltd*.

- Britton, A.M. (2012). The Beauty Industry's Influence on Women in Society" Honors Theses and Capstones. 86.
- Fonseka, S., & Wijekoon, V.D.B. (2019). Use of skin whitening products in sri lanka: an observational study. *Sri Lanka Journal of Medicine*. Vol 28(1).
- Hussainillah., Noreen,S., Rehman,F.A., Waseem,A., Zubair,S., Adnan,M.,& Ahmad, I.(2017).Comparative study of heavy metals content in cosmetic products of different countries marketed in Khyber Pakhtunkhwa Pakistan. *Arabian Journal of Chemistry*. Vol 10(1).
- Pereira, J.X & Pereira, T.C. (2018). Cosmetics and its Health Risks. *Global Journal of Medical Research*. Vol 8(2).
- Khan A.D., & Alam, M.N.(2019).Cosmetics and their associated adverse effects: a review.*Journal of applied pharmaceutical science and research*. Vol 2(1).
- Kalicanin, B., & Velimirovic, D. (2015). A Study of the Possible Harmful Effects of Cosmetic Beauty Products on Human Health. *Biological Trace Element Research*.pp 476–484.
- Luccaa, J.M., Joseph, R., Kubaish, Z.H.A., Maskeen, S.M.A., & Alokaili, Z.A. (2020). An observational study on adverse reactions of cosmetics: The need of practice the Cosmetovigilance system. Saudi pharmaceutical journal.
- Pudaruth. S., Juwaheer, T.D. & Seewoo.Y.D. (2015).Gender-Based Differences in Understanding the Purchasing Patterns of Eco-Friendly Cosmetics and Beauty Care Products in Mauritius: A Study of Female Customers.*Social Responsibility Journal*. Vol 11(1). pp179 – 1198.
- Rawat, S.R. & Garga, P. (2012). Understanding Consumer Behaviour Towards Green Cosmetics. *SSRN Electronic Journal*. Retrieved from research gate: https://www.researchgate.net/publication/256027708
- Tamizhjyothi. K. (2017).Users' perspectives about cosmetic products An analytical study.*Journal of Emerging Technologies and Innovative Research* (JETIR).Vol 4(9).
- Vanessa, A.I., Hartmann, P., Diehl, S., Terlutter, R. (2011). Women Satisfaction With Cosmetics Brands: The Role of Dissatisfaction and Hedonic Brand Benefits. *African Journal of Business Management*. Vol: 5(3).