



***Knowledge, attitude and practices University BSN Nursing Students about Undesirable Effects of Cosmetics in Lahore City***

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***Abstract***

***Introduction:***

People like to look good, and humanity and culture are as ancient as the idea of cosmetics. The need to embellish one's own body to look beautiful has been an instinct in the human race ever since the Tribal Days. In particular, a number of cosmetics products, such as products of skin care, goods of hair, scents, oral hygiene goods and nail crops, are used by women and can contain toxic substances that are detrimental to their wellbeing. The use of cosmetics has triggered numerous antagonistic reactions, including Local responses to systemic reactions and significant symptoms are less intense.

***Results:*** Students had less knowledge about use of cosmetics. Some students gave correct answers while most of them did not. Their attitude and practice were also poor about undesirable effects of cosmetics.

***Objectives***

- To assess knowledge about use of cosmetics among students. .
- To identify the attitude about use of cosmetics among students.
- To determine the practice of students about use of cosmetics.
- To find out the correlation between the knowledge of undesirable effects and attitude of students about use of cosmetics.

***Methodology:*** A cross- sectional analysis of 230 nursing students was conducted in the city of Lahore of BSN program. Information was collected through a questionnaire developed by the searcher to determine the awareness,

attitude and practice of the participant. SPSS 25 tabulated and evaluated data using descriptive analysis and Pearson's coefficient of correlation.

***Conclusions:*** awareness level about the undesirable properties of cosmetics was poor.

There was uncomplimentary Repetition of students.it is necessary to give education to students about risks of cosmetics through formal channel.

***Keywords:*** Knowledge, Attitudes, Practice, Cosmetics, students, Lahore

***Introduction:***

The word cosmetics is taken from kosmeticos , a Greek word meaning to adorn. Materials used for beautification or enhancement of beauty have been in the category of cosmetics since the early days. People want to look beautiful and the concept of cosmetics is as old as humanity and history. The need to embellish one's own body to look beautiful has been an instinct in the human race ever since the Tribal Days. In particular, a number of cosmetics products, such as products for skin maintenance, goods for hair, fragrances, products for oral hygiene and goods for nail, are used by women and can contain toxic substances that are detrimental to their wellbeing. Human body appearance has been known to boost cosmetics for a long time. People are tempted to fake their appearance as a solution for their insecurities in a world obsessed with beauty. The assessed size of today industry of beauty products is about \$20 billion worldwide. As a consumer, we are constantly drawn to the use of cosmetics for beauty and personal care. Then there is a deep dark side to these items, Which are supposed to make us feel safe and look amazing. In addition to appropriate limits, various harmful

additives and dangerous chemicals used in cosmetics are integrated. These compounds can have serious adverse skin effects and can be ingested into the skin and other carcinogenic organs as well. Not only have cosmetics entered the world of beauty, but they still play a major role in one's everyday life. Therefore, making consumers aware of the various adverse effects of cosmetics and additives used in cosmetics is a must. (Khan, & Alam, 2019)

Women have historically used makeup to increase their features and to monitor their facial appearance and, possibly, their physical appeal. (Nourmoradi et al., 2013). Nowadays a revolution is taking place in the beauty and toiletries industry. As a result of a change in the look and feel amazing all over the world.

(Pellegrini et al., 2011).

A product of cosmetic is demarcated as any material or grounding planned to come into contact with the different Sections of the human body (epidermis, hair structure, nails, lips and external genital organs) or the teeth and mucous membranes of the oral cavity for primary or primary shaving purposes, Perfuming, modifying the appearance and/or fixing the body's odor or retaining the sand. The United States of America's Federal Food, Drink and Cosmetic Act (FDCA) describes cosmetics as 'proposed documents' to be brushed, dispensed, speckled or squirted onto or else useful to the human body or some fragment of it. (Dehvari et al., 2018).

These principles focus on items for example creams for skin, ointments, incenses, blushes, nail polishes, eyes and ears. The makeup range covers temperament measures, cleanser ingredients, shampoos, permanent waves, hair colors, toothpastes and sprays. (Pellegrini et al., 2011).

Although cosmetic products should not affect health of human, their usage can be connected with some recognized and unidentified undesirable responses arising from fewer serious adverse reactions, resident reactions (erythema and urticarial reckless, discomfort, sensation of burning, minor impatient corresponding to the product's application area), systemic reactions (rhino conjunctivitis, fever, asthma, inflammation, Compared to their longstanding harmful possessions on the body as a whole, they manifest in the skin. (Dehvari et al., 2018) However most consumers are more worried with the short-term outcomes of using cosmetic products.

Their appearance in the skin relative to their long-term detrimental effects on the body as a whole.

Consumers prefer to assume that beauty items are Good and not a risk to public health (Cortez-Pereira et al., 2010) Understanding the actions of the customer, i.e. the decision-making process and the physical behavior of the customer. Persons engaged in the appraisal, purchase, utilization or disposal of products and services"KAP surveys are expected to support Prepare, incorporate and review health education programs. (Nair, V. K. 2007).

### *Literature review*

Study entitled "Knowledge, Attitudes, Practices (KAP) and Sources of Information on Safe Cosmetic and Personal Health Products among Serrano Journalists" Big Philippine Newspaper" (15) found that journalists had a standard of understanding (52.39 per cent) that was similar to a poor comprehension. These findings are consistent with the outcome of our research. (Serrano MM, 2015).

Furthermost of those who used skin lighteners (85 Africans and 76 percent of Indians) said they were conscious of the issue in another survey by Dlova et al. Adverse effects of the medications, but they did not seem to be aware of the medication, how it was used, or the choice to use the product. Overall, we can assume that there is a degree, There is minimal awareness among consumers of cosmetics. The mean score of participants on the use of cosmetics was  $595 \pm 2.47$ . (range 0 to 14). Average score of attitude and work on the use of Cosmetic was  $31.80 \pm 3.96$  (range 21 to 40) and  $12.92 \pm 2.83$  (range 4 to 18) respectively. There was no substantial relationship between knowledge and experience among participants, but there was a optimistic noteworthy association ( $r=0.248$ ,  $P=0.01$ ) between knowledge and attitude. The results showed a high statistically relevant Association of age expectations and habits ( $r=0.168$  and  $0.139$ , respectively). (Dehvari et al., 2018).

The mean score of participants on the use of cosmetics was  $595 \pm 2.47$  (range 0 to 14). Average score of attitude and work on the use of Cosmetic was  $31.80 \pm 3.96$  (range 21 to 40) and  $12.92 \pm 2.83$  (range 4 to 18) respectively. There was no substantial relationship between knowledge and experience among participants, Yet there was a strong positive association between information and mindset ( $P=0.01$ ,  $r=0.248$ ). The outcomes presented a high statistically relevant. Association of age expectations and habits ( $r=0.168$  and  $0.139$ , respectively). (Panico et al., 2019).

The response rate was 87.2%, with 567 out of 650 questionnaires issued. The respondents' mean age (SD) was 32.0 (10.2) years. Of the respondents, at some point, 82.6 percent (464/562) dyed their hair. In comparison, in the last 12 months, 69.3 percent (334/482) dyed their hair. The mean age (SD) of the participants was 22.2 (7.1) years of age when they first dyed their hair (range, 7-50). 76.8 percent (354/461) of the participants used permanent dyes, and almost the same number of participants indicated that these dyes were the better form of hair dye. 52.4% (278/531) of the participants, however, suggested that hair coloring was dangerous and 36% (191/531) believed that cancer could be caused by hair coloring. Younger women tend less often to dye their hair ( $P<.001$ ), whereas less educated women tend to dye their hair more regularly ( $P=.013$ ). (AlGhamdi & Moussa, 2011).

Cosmetics are items that are designed for washing, embellishing or modifying appearance and enhancing attractive factors to be applied to the body.

The present research was conducted to identify the health hazards, habits and practices associated with the use of cosmetics by young people. A quantitative, non-experimental, descriptive research design was used and participants were recruited by multi-stage cluster sampling. Research has been conducted among 500 young people from selected colleges in the Kottayam district. The method, the well-being belief model of Rosenstoch, has theoretically assisted science. The tools used to collect data were the Socio-Personal Data Sheet, the uniform Information Assessment Questionnaire, the Action Evaluation Rating System and the Checklist for the Evaluation of Cosmetic Work. The data collected was analyzed using descriptive and inferential statistics. Findings also shown that 83.2 per cent of young people have average comprehension and 14.8 per cent have poor knowledge of the health effects of cosmetics. 93 per cent of young adults have an unfavorable mindset, even if 77.8 per cent of males and 80.6 per cent of females occasionally practice cosmetics. There is no meaningful correlation between cognition and attitudes, and there is no major association between youth understanding, attitudes and experience with the variables selected . ( Sreedevi & Mrs. Sheena NL).

Females had a higher number of adverse reactions in this sample and this result is consistent with an analysis carried out in Nepal. ( Di Giovanni et al.,2006).

The most frequently reported cases were allergic reactions and acne, and similar allergic reactions were reported in other studies as well. ( Getachew & Tewelde, 2018).

As reported in Malaysia, younger age participants reported more adverse reactions that may be attributed to this age group's increased absorption rate, as well as a better awareness of cosmetic-related adverse events as age increases. ( Mansor, Ali, D. E. B. M, & Yaacob, 2010).

### **AIMS OF THE STUDY**

The purpose of the research was to examine BSN students' knowledge, attitudes and practices about the undesirable possessions of cosmetics in Pakistan City.

### **SIGNIFICANCE OF THE STUDY**

Because of the inappropriate use of cosmetics in STUDENTS and the absence of studies in this affection, study was conducted in Lahore, Pakistan, to identify women's knowledge, perceptions and behaviors of the antagonistic possessions of cosmetics.

### **Methodology**

A cross- sectional analysis of 230 nursing students was conducted in the city of Lahore of BSN program. Information was collected through a questionnaire developed by the searcher to determine the awareness, attitude and practice of the participant. SPSS 25 tabulated and evaluated data using Pearson's coefficient of correlation and descriptive analysis.

### **CONCEPTUAL DEFINITIONS**

#### **Knowledge**

The fact or status of intelligence possession or learning.

#### **Attitude**

A well-established way to think about something or feel about it.

#### **Practice**

The actual application or use, as opposed to the theories that refer to it of a principle, belief, or practice.

### **OPERATIONAL DEFINITIONS**

#### **Knowledge**

Awareness is an understanding, understanding, or understanding of someone or things, such as details, skills, or objects (Zagzebski 2017)

#### **Attitude**

Attitude is the person's propensity to respond favorably and unfavorably to the condition of an object person or to some other discriminatory trait of the individual's environment.

#### **Practice**

Education is the method of rehearsing an action over and over or engaging in an event over and over again as 'practice makes perfect' in order to improve or master it in the expression.

(Lave and Wenger 2002)

### **Material and methods**

#### **Study design**

In this analysis, a cross-sectional sample method will be used.

#### **Setting**

Learning will be conducted in University's female student.

#### **Duration of study**

Study will be done from September to January 2020.

#### **Work plan**

Proposal submission (1 month), data processing (1 month), thesis complete (1 month)

#### **Target Population**

Target population of study will be Nursing Female students of Lahore UNIVERSITY.

#### **Sample Population**

Sample population size will be 146 female students.

#### **Sample Size:**

N= 230

Sample size calculated by Slovin's formula

$n = N / (1 + N(e)^2)$

$n = 230 / (1 + 230(0.05)^2)$

$n = 230 / (1 + 230(0.0025))$

n= 146

#### **Target population:**

Target population of the study will be BSN Nursing students.

### **DATA ANALYSIS PROCEDURE**

Data analysis will be done on SPSS (version 25). Descriptive statistics will be used to check BSN students' knowledge attitude and practice on side effects of cosmetics. A p-value inferior to 0.05 was found statistically important.

**Sample Selection Criteria**

**INCLUSION CRITERIA**

Inclusion requirements of study include the female students of university of Lahore.

**EXCLUSION CRITERIA**

Exclusion criteria of study involve the male students and those not use cosmetics.

**Ethical consideration**

For the participants, the purpose of the study was clarified and they were assured of the confidentiality of their results. Furthermore, prior to registration, contribution in the study was optional and verbal agreement was received.

**RESULTS**

**Table no 1**

**Demographic Data**

Sr No	Variable			
1	Age in year	20 to 22 53.1%	22 to 25 24.5%	>25 21.8%
2	Education	BScN 99.3%	PostRN	Sports Science

Table no 1 shows demographic data of students. Most of students were 20 to 22 years old, they all were BSN program students.

**Table no 2**

**Assessment of the knowledge about cosmetics**

Sr No	Variables			
1	The first step for cleaning the skin	Oil 12.2%	Cleaner milk 66.7%	No idea 20.4%
2	the most prevalent cause of skin allergy	Perfumes 36.7%	Jewelry 42.2%	No idea 20.4%
3	the most harmful mascaras for eyelashes	Simple 25.9%	Waterproof mascaras 58.5%	No idea 15.0%
4	Advantages of using sun screens in cosmetics	Dust 27.2%	Skin cancer prevention 58.5%	No idea 13.6%
5	the most prevalent side effect of chemical	Oiliness	Skin dandruff	No idea

	dyes	16.3%	66.7%	16.3%
<b>6</b>	. the most important reason of harmful effects of hair dyes	Using color 46.3%	Using oxidants 36.7%	No idea 16.3%
<b>7</b>	Appropriate shampoo after hair dying	Promoters 36.7%	Any shampoo 46.3%	No idea 16.3%
<b>8</b>	the most common side effect of cosmetics and pharmaceuticals on skin	Dryness 24.5%	Skin irritation and sensitivity 51.7%	No idea 23.1%
<b>9</b>	Appropriate skin for using cosmetic powders	Wet skins 36.7%	Dry skin 46.3%	No idea 16.3%
<b>10</b>	Cosmetics that had the most side effects on skin	Powders 24.5%	Oily cosmetics 51.7%	No idea 23.1%
<b>11</b>	. Side effects of nail polish	Itching 40.8%	discoloration of nails 43.5%	No idea 15.0%

Table no 2 shows that, Students of BSN had minimum knowledge about use of cosmetics.

**Table NO 3**

**Assessment of the attitude**

<b>12</b>	Inappropriate use of cosmetics causes rashes, skin darkening and wrinkles	Agree 29.9%	No idea 58.5%	Disagree 10.9%
<b>13</b>	The quality of cosmetics is more important than their price	17.7%	74.8%	6.8%
<b>14</b>	Tattoo causes cancer	88.4%	6.8%	4.1%
<b>15</b>	Laser therapy is carcinogenic	78.9%	12.2%	6.8%
<b>16</b>	Hair dying on pregnant and breastfeeding women has harmful effects	61.2%	25.9%	12.2%
<b>17</b>	Using chemical dyes and decolonization may cause	36.7%	50.3%	12.2%

	white hair			
<b>18</b>	Using sunscreens should be started from earlier ages	57.1%	25.9%	16.3%
<b>19</b>	I usually prefer to use water for cleaning of cosmetics	66.7%	16.3%	16.3%

Table no 3 shows that, attitude of students was little good about usage of cosmetics.

**Table no 4**

**Assessment of the practice**

<b>20</b>	Consulting with pharmacists for selecting cosmetics	Yes	No
<b>21</b>	Using others' cosmetics	58.5%	20.4%
<b>22</b>	Using sunscreens	72.1%	9.5%
	Paying attention to following factors in the selecting of dye hair		
<b>23</b>	Continuity of color	43.5%	55.8%
<b>24</b>	Manufacturer Company	47.6%	51.7%
<b>25</b>	Harmlessness	54.4%	44.9%
<b>26</b>	Expiration date	50.3%	49.0%
<b>27</b>	Doing sensitivity test before hair dying	50.3%	49.0%
	Paying Attention to following factors when buying cosmetics		
<b>28</b>	Production and consumption data	54.4%	44.9%
<b>29</b>	Production license	62.6%	36.7%
<b>30</b>	Brand credibility	73.5%	25.9%
<b>31</b>	Using a ketone for cleaning nail polishes (if they use nail polishes)	69.4%	29.9%

Table no 4 shows that, students had more practices about cosmetics.

**Discussion**

Present study is conducted from students of BSN program. 53.1%(n=78) were 20 to 22 years old ,24.5%(n=26)were 22 to 25 years old and 21.8%(n=32) were more than 25 years old.

12.2%(n=18) participants known that the first step for cleaning the skin is oil,66.7%(n=98) known cleaner milk while 20.4%(n=30) had no idea about that .36.7% (n=54) participants known that the most prevalent cause of skin allergy is using perfumes,42.2%(n=62) known that jewelry cause skin allergy while 20.4%(n=30) had no idea about this.

58.5%(n=38) participants known that the most harmful mascaras for eyelashes are waterproof mascaras,while 25.9%(n=86) known that simple mascaras are harmful and 15 %(n=22) participants had no idea about this.

27.2%(n=40) known that adavantages of using sunscreens are protect from dust,58.5%(n=86) known that sunscreens prevent from skin cancer while 13.6%(n=20) had no idea about this.

16.3%(n=24)participants known that The most common side effect of chemical coloring is oiliness,66.7%(n=98) participants known that skin dandruff while 16.3%(n=24) had no idea about this .46.3%(n=68) participants known that hair dyes is the most important reason of harmful effects

while 36.7%(n=54) participants known that using oxidants and 16.3%(n=24) had no idea about this.24.5%(n=36) Participants acknowledged that dryness is beauty products that have had the most undesirable effects on the skin,while 51.7%(n=76) participants known that most side effect is skin irritation and sensitivity and 23.1%(n=34) had no idea about this.40.8%(n=60) participants known that side effect of nail polish is itching ,while 43.5%(n=64)participants known that nail polish cause discoloration of nails and 15.0%(n=22) had no idea about this.36.7%(n=54)participants known that appropriate skin for using cosmetics powders are promoters ,46.3%(n=68)known that any shampoo while 16.3%(n=24) had no idea about this. It is consistent with the findings of a cross-sectional analysis on women in the city of Yazd conducted in 2011 to evaluate women's knowledge, attitudes and habits about cosmetic opposing possessions.

It indicates that the mean score of participants 21 on the use of makeup was  $5.95 \pm 247$  (ranging 0 to14).29.9%(n=44) participants agreed that Unfair application of makeup induces rashes and darkening of the skin,58.5%(n=86) not agreed while 10.9%(n=16) had no idea about this 17.7%(n=26)participants agreed that Cosmetics are more significant than their price in terms of consistency ,6.8%(n=10) not agreed while 74.8%(n=110) had no idea about this. 88.4%(n=130)participants agreed that tattoo causes cancer,6.8%(n=10) had no idea about this while 4.1%(n=6) disagreed with that.78.9%(n=116) participants agreed that laser therapy is carcinogenic ,12.2%(n=18) had no idea about this while 6.8%(n=10)participants not agreed with that.61.2%(n=90) Participants accepted that dying hair had adverse effects on breastfeeding and breathing females,12.2%(n=18) not agreed with this while 25.9%(n=38) had no idea about this .

36.7%(n=54)participants agreed that using chemical dyes and decolonization may cause white hair,12.2%(n=18) participants disagreed while 50.3%(n=74) had no idea.57.1%(n=84) participants agreed that using sunscreens started from earlier age ,16.3%(n=24)not agreed with this while 25.9%(n=38)had no idea about this .66.7%(n=98)participants agreed that they usually prefer to use water for cleaning the cosmetics,16.3%(n=24)not agreed while 16.3%(n=24) had no idea about this. Similarly, a research conducted at the GOVT College of Nursing Kotyam, The findings of attitudes towards the use of cosmetics by young people. It was found that 93% of young people showed an adverse approach to cosmetic use.

58.5% (n=86) participants using cosmetics while 20.4% (n=30) not using other cosmetics.72.1% (n=106) participants using sunscreens while 9.5% (n=14) not using sunscreens.43.5%(n=64) using continuity of color while 55.8%(n=82)were not using this.47.6%(n=70) have paractices about manufacturer company while 51.7%(n=76)have no paractices about this.54.4% (n=80) had practices of harmlessness while 44.9% (n=66) had not.50.3%(n=74) participants had paractices about checking

expiration dates while 49.0%(n=72)had no paractice.50.3% (n=74)participants had practices on doing sensitivity test before hair dying while 49.0%(n=72) had no practices on it.54.4%(n=80) had practices on production and consumption data while 44.95%(n=66)had no practices on this.62.6%(n=92) participants had practices on production license while 36.7%(n=54) had no practices on it. A research performed at the Kottayam College of Governors reveals that there is no substantial correlation between knowledge, behaviors and experience with any of the variables. A cross-sectional research on the pattern of use of cosmetics and associated adverse reactions among female students at Mekelle University found that there was a substantial correlation between the economic status of students and the use of cosmetics, which contradicts the results of the current study in relation to the use of 50cosmetics.

**Conclusions:** awareness level about the undesirable effects of cosmetics was poor. There was uncomplimentary Practice of students.it is necessary to give education to students about risks of cosmetics through formal channel.

#### **Limitations**

- Less time duration
- Lack of available resources
- This study had been conducted in one institute therefore it effects the result of generalizability of results,
- Low sample size

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