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Research

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# Surveying the Rate of Using Cosmetics Among the Kashan's Women

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## ABSTRACT

Using cosmetics is very popular among women in Iran. Direct contact with some of the cosmetics can cause irreparable harm to consumers' health. Regarding the importance of the rate of using cosmetics and the possibility of their side effects, this research studies the rate of using cosmetics among the Kashan's women. Data of this study were obtained through a designed questionnaire filled by 800 women in Kashan. Sampling was done randomly and in a multistage cluster. After obtaining the data, the graphs and tables were drawn and the data were analyzed by Chi-square and Mann-Whitney. The highest rate of continuous use of cosmetics was in the 20-29 years old group and the lowest was in the age group of 49 years old and above. The highest rate of continuous use of cosmetics was in the women with master's degree, above (47.6%) and the lowest was among the illiterates (10%). 50% of People with high income and 34.8% with lower income used cosmetics continuously. Among the cosmetics, the most used item was lipstick with 74.5%. Variables such as demographic characteristics, socioeconomic status, family relations are the effective factors on the rate of using cosmetics by women. The main reason for using cosmetics by women was enhancing beauty and attracting attention.

**Key words:** Make up, Cosmetics, Health's Women, Public health.

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## 1. INTRODUCTION

Since the beginning of human civilization, cosmetics have had a role as a part of routine body care by women of different social classes (1). Personal care products and cosmetics are used daily by millions of consumers (2). US food and drug administration (FDA) defined cosmetics as "articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body for cleansing, beautifying, promoting attractiveness, or altering the appearance" (3). Personal care products include soaps, shampoos, bath products, sunscreen creams, hair dyes, cosmetics, toothpastes, deodorants and other materials (4). One of the essential needs of women with different phenotypes is skin and hair care (5). To make up and show

off are considered as important characteristics of women. This need makes them use different types of cosmetics (6). Nowadays, some girls consider using cosmetics as inseparable part of their life. That is why, our country is the second consumer of cosmetics in the Middle East and the 7<sup>th</sup> cosmetic importer in the world (7). From the past, women used to make up with different types of cosmetics. In the recent years, use of cosmetics has increased considerably and excessive and inappropriate use of poor quality and insanitary cosmetics seriously has threaten the consumers' health (8). Direct contact with nonstandard cosmetics can cause irreparable harm to consumers' health (9). Excessive use of nonstandard cosmetics transmits contamination, pathogens factors and bacterial infections, so sanitary of cosmetics is significant (10). Among the

hazardous materials in the composition of cosmetics, toxic elements are widely used in the colorful cosmetics which eye shadow is a major example (2). More than 10000 ingredients are used in cosmetics. Some of these chemicals are Diethanolamine (DEA), Formaldehyde and its compounds, Glycol Ethers, Lead, Mercury, Parabens, Phenylene diamine and Phthalates which can cause cancer, birth deficiency, asthma exacerbation, anemia and adverse effects on nervous system, kidney, digestive system, etc(11) . The formaldehyde available in eye shadow, mascara and other cosmetics can enter the body through the skin and eye contact and cause asthma and significant skin irritation, pain and rash on the cosmetic applied spot (12). Skin stimulus and allergen factors are unavoidable effects of cosmetics (13). "Mahe" study in Senegal(2003) on skin bleaching creams indicated that using glucocorticoid caused exacerbation of skin infections and acne (14)." Olumide" study (2008) showed that bleaching creams' effect was very serious and fatal (15). In the study of "Raynaud "(2000), there was a significant relation between the risk of high blood pressure and diabetes with using cosmetics (16). Side effects of bleaching creams are skin disorders like contact dermatitis, exogenous, nephropathy, nervous and eye disorders, etc. There is also a significant relation between these side effects and the length of time of using cosmetics and the simultaneous use of different products (17). According to" Ghazvini" (2007) study, 14.5% of mascaras and 2.7% of eye liners have been contaminated even before use (18). "Anton" (1988) declared that nail cosmetics and perfumes were about 13.4% and 8.4% responsible for causing allergy in the patients with cosmetic related contact dermatitis (19). Results of the studies show that women by using cosmetics can be more successful in job opportunities (20). Women, in comparison with men, pay more attention to their beauty (21). Using cosmetics more than usual creates new phenomenon in the society which necessarily does not indicate the improvement of social health. So, studying the rate of cosmetics used by women in Kashan was considered. Using the results of this study can increase the

health level concerning using cosmetics; so, this research was done.

## 2. MATERIALS AND METHODS

This descriptive study was performed using a questionnaire prepared according to the related theories and texts and also the results of previous studies. The questionnaire was distributed among 800 Kashan's women who were selected at random and multistage cluster method. To make sure about the credibility of the questionnaire, it was handed to the experts and specialists and they approved its validity. Also the validity assessment tools were given to the experts and the necessity and suitability was investigated and the CVR (Content Validity Ratio) and CVI (Content Validity Index) indexes were evaluated as 0.99 and 1, respectively. To determine the reliability, the questionnaire was given to 40 consumers and Cronbach's alpha was calculated as 0.73. In this study, the rate of using cosmetics was determined through 25 questions about educational, job, believe and social status and also age. In order to collect the necessary data, the questionnaires were given to women to fill up. If any of them did not have the knowledge to read and answer the questionnaire, the questions were read for them. After obtaining the data, the graphs and tables were drawn and the results were analyzed by STATA 10 statistical program of SPSS software.

## 3. RESULTS AND DISCUSSION

The data showed that the studied individuals' age was between 12 to 77 years old. The average age was 29. The highest rate of applying cosmetics on a continuous basis was in the age group of under 30 and by increasing the age the rate of continuous use of cosmetics was reduced to about 10%. The highest rate of continuous use of cosmetics belonged to the women with 20-29 years old (40.3%) and the lowest rate was 10% for the age group of more than 49 (Table 1).

Table 1. The rate of using cosmetics in different age groups

Age groups Using cosmetics	Continuously (%)	Often (%)	Few (%)
<20	36 (39.1)	30 (32.6)	26 (28.3)
20-29	143 (40.3)	143 (40.3)	69 (19.4)
30-39	75 (36.9)	83 (40.9)	45 (22.2)
39-49	20 (21.1)	28 (29.5)	47 (49.5)
>49	4 (10)	14 (35)	22 (55)
total	278 (35.5)	298 (38)	209 (26.5)

34.6% of Kashan natives continuously used cosmetics. 47.6% with master's degree and above, 42.6% with high school diploma and 39.3% with associate degree continuously used cosmetics. The individuals whose fathers' education was master and above, about 70% and

the individuals whose mothers' education was master and above, about 100% used cosmetics continuously. 61.5% of the divorced and 50% of the widows continuously used cosmetics (Figure 1).

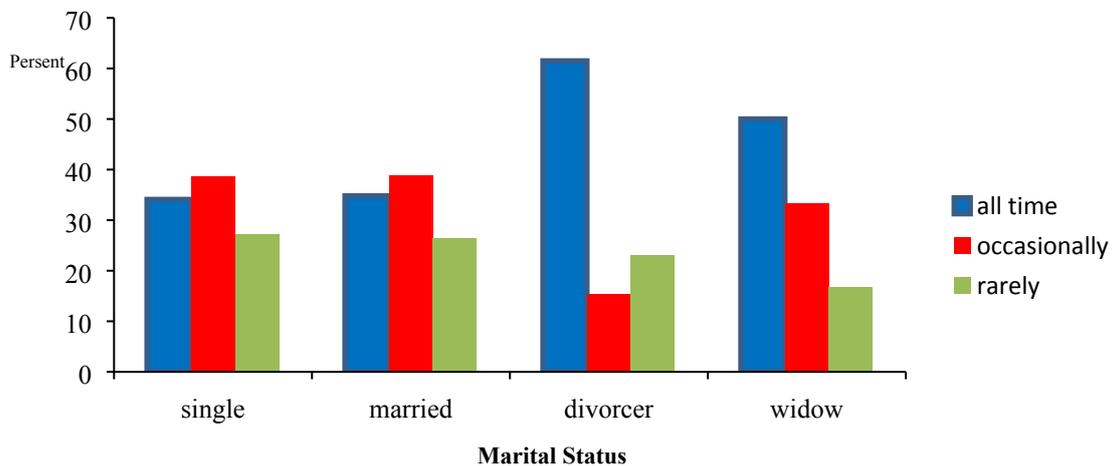


Figure 1. The relation between the rate of using cosmetics and marital status of individuals

The results showed that 48.5% were housewives, 26.9% were students, 14.8% were employees and 9.3% were self-employed. 55.7% of the self-employed individuals and

37.2% of the students used cosmetics continuously (Figure 2).

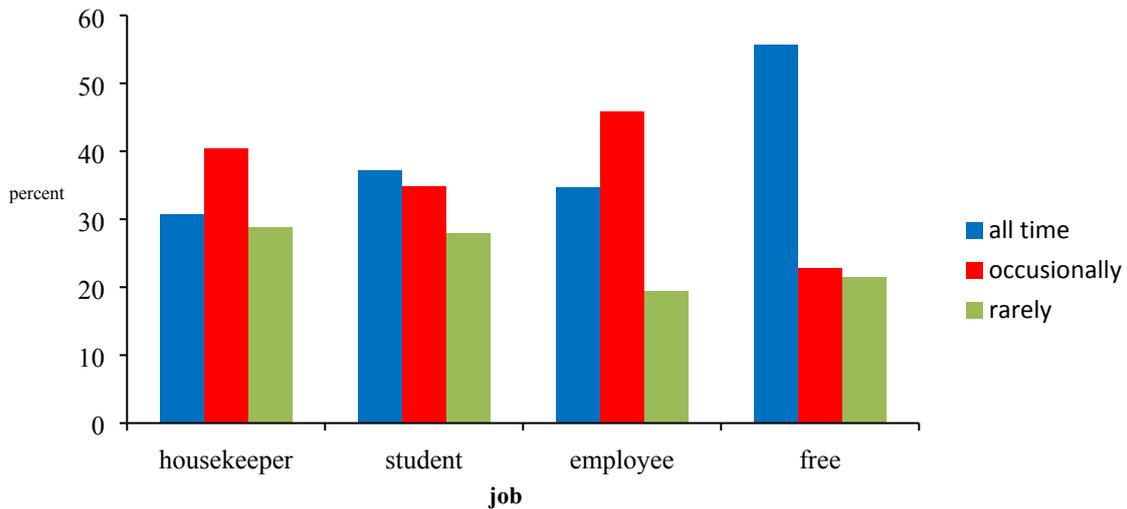


Figure 2. The relation between the rate of using cosmetics and job

The results showed that individuals with higher income significantly paid more for cosmetics rather than the

groups with lower economic status (Figure 3).

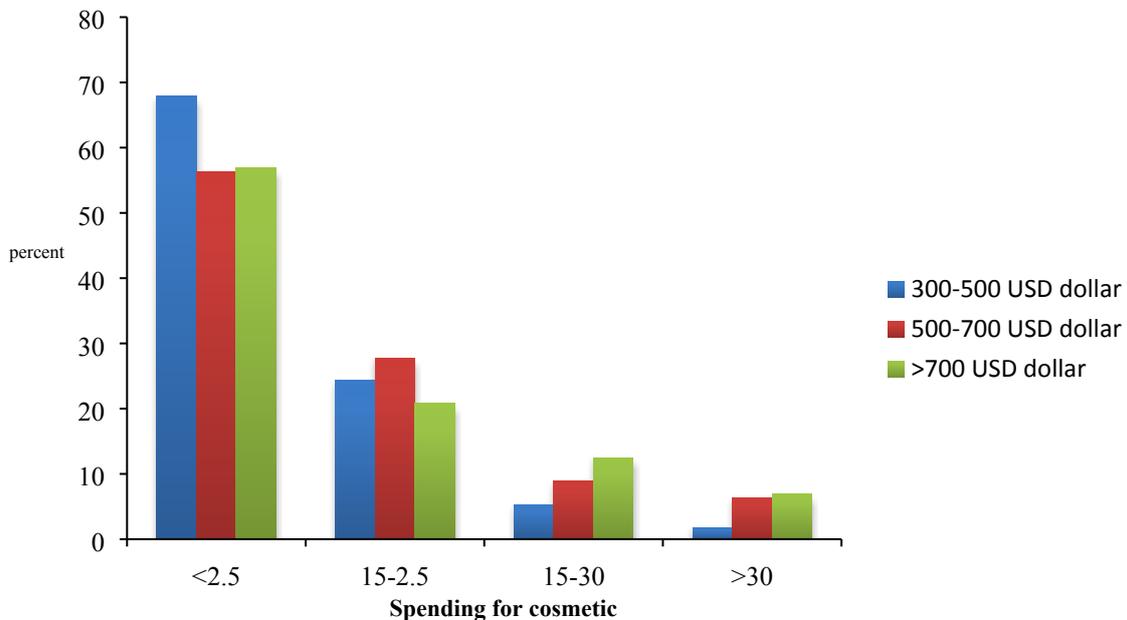


Figure 3. The relation between economic status and the rate of spending for cosmetics (numbers are in USD dollar)

48.8% of less religious women used cosmetics continuously while only 25.4% of religious individuals used cosmetics. The results of the study showed that 39.2% of individuals with enough knowledge of harmful effects of cosmetics used cosmetics continuously. 35.3% used cosmetics once a day, 17.6% many times a day, 23.8% once in few days and 9.8% once in few weeks. The highest rate of using cosmetics was 77.3% in the wedding ceremony and the lowest rate was 5% in the mourning ceremonies. Among the cosmetic products, the highest rate of use was for lipstick with 74.5% and the lowest was for eye shadow with 11.9%. Among the care products, the highest rate of use was 46% for moisturizing creams and the lowest was for cleansing milk with 4.9%. 40.8% of the individuals believed that the main and most important

reason for using cosmetics was the tendency to look more beautiful. After the tendency to look more beautiful, other reasons were; being stylish (15%), personal tendencies (23.8%), covering skin problems (8.9%), increasing self-confidence (8%) and others' appreciation and approval (3.3%). In 44.9% of the cases, husbands were the encourager of women to use cosmetics. The results of this study show that using cosmetics is very common among women. There is a significant relation between the rate of using cosmetics and age, marital status, migration, economic status and religious attitude. The highest rate of continuous use of cosmetics is in the age group of under 30 and by increasing the age the rate of continuous use of cosmetics is reduced to about 10%. This result is the same as studies of Kiani (2013) and Norudin (2010) (7, 22).

Manova (2013) study showed that the age of cosmetic use had reduced in Switzerland and Germany (23). The results show that non-native continuous users of cosmetics are more than natives and it seems that this difference is because of lack of family supervision among the migrants. The results show that there is a significant relation between migration and the interest of women in using cosmetics which is the same with Kiani (2013) study (7). This study shows that there is a significant relation between the socioeconomic status and the interest of women in using cosmetics. Individuals with higher education and better economic status use cosmetics more and spend more for it. This result is the same as studies of Moradi (2012), Rezaei (2009), Babamiri (2011) and Kiani (2013) (6-8, 21). Also Manova (2013) remarked that there was a relation between the rates of using cosmetics with the socioeconomic status (23). Regarding to Nash (2006) study, women with makeup can be more successful in job opportunities (20). 61.5% of the divorced and 50% of widows continuously use cosmetics. This means that there is a significant relation between marital status and interest of women in using cosmetics. This result is the same as Kiani (2013) and Norudin (2010) studies (7, 22). One of the effective factors on the rate of using cosmetics by women is the religious attitude. This study shows a significant relation between religious attitude and using cosmetics. In fact the relation has an opposite trend. This result is the same as Moradi (2012), Rezaei (2009), Babamiri (2011) studies (6, 8, 21). The results of the study shows that 40.8% of women use cosmetics because they like to look more beautiful but Moradi study (2012) showed that the most important reason for using cosmetics is to attract attention (8). Maybe it can be said that a part of the tendency to become beautiful is to attract attention. After the tendency to be beautiful, being stylish, fashionable and increase of self-confidence are the most important reasons for using cosmetics which are the same as Moradi (2012) studies (8). The highest rate of using cosmetics is in wedding Ceremony which this result is the same as Kiani (2013) study (7). This study shows that more than 46% use moisturizing creams and after that the highest rate of use is sunscreen cream, soap, antiperspirant, facial wipes and cleansing milk, respectively. Manova (2013) study showed that the highest rate of cosmetic use in children and adolescents was sunscreen cream, body lotion, face cream, lip balm, hand cream and lipstick, respectively and the highest rate of use in adults was face cream, sunscreen creams, hand cream, body lotion, lip balm and lipstick, respectively (23). The results of Loretz (2006) study indicated that the highest rate of use referred to hair spray, perfume, spray, liquid cream, shampoo, body shampoo and antiperspirants, respectively (24). Ficheux (2014) study showed that 88% of women at least used nail polish once a year and 98% of the adult consumers continuously used nail polish (25). Maybe the difference of using rate of different cosmetics is because of cultural, geographical and weather conditions. Nowadays, using cosmetics has a high

prevalence in Iran. This issue has different reasons such as lack of knowledge about the problems and risks of using these materials, attracting attention of others, lack of information and blindly following the media. By increasing the positive role of health authorities in giving awareness to people about the risks of excessive use of cosmetics and the fact that some of them are unhealthy and fake, the rate of health and economic damages to the society can decrease hghani (26-28).

#### 4. CONCLUSION

This study shows that variables such as demographic characteristics, socioeconomic status, family relations and cultural background are some of the effective factors on the using rate of cosmetics by women. To enhance beauty and attract attention are major reasons why the women of our society use cosmetics. The increasing use of cosmetic and hygienic products has a relation with socioeconomic status and the changes through it. Using cosmetics more than usual shows the outbreak of a new phenomenon inside the society that necessarily does not show the improvement of social health. By increasing the women's knowledge about cosmetics contaminated with infectious and chemical agents, the hygiene level for using cosmetics can be increased.

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#### AUTHORS CONTRIBUTION

This work was carried out in collaboration among all authors.

#### CONFLICT OF INTEREST

The authors declared no potential conflicts of interests with respect to the authorship and/or publication of this paper.

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