

Perception regarding selection and use of skincare products and the impact of advertisement: a questionnaire-based randomized survey

Sudipto Mangal, Moumita Ray, Sakshar Saha, Shubham Paul, Himangshu S. Maji

Department of Pharmaceutical Technology, JIS University, Agarpara, Kolkata, West Bengal, India

Correspondence to Moumita Ray, PhD, Department of Pharmaceutical Technology, JIS University, Agarpara, Kolkata 700109, West Bengal, India. e-mails: moumita.ray27@gmail.com, moumita.ray@jisuniversity.ac.in

Received: 14 April 2020

Revised: 18 June 2021

Accepted: 30 June 2021

Published: 20 September 2021

Egyptian Pharmaceutical Journal 2021, 20:173–179

In the present scenario in the market, an enormous growth of beauty products have become one of the leading industries in the world and the consumption and using of cosmetic products is increasing rapidly at an alarming rate. The survey mainly focused to understand the knowledge and perception of the commoners' regarding the perception of using skincare products that also emphasize some important aspects related to the promotion of misleading health claims and magical cures and adverse reaction of skincare products among the Indian population. A cross-sectional study was conducted from April to May, 2020, and 200 participants responded in this online-based survey and data were collected using a predesigned questionnaire. The present studies showed that 61% of the common people use the skincare products daily and were average spenders on beauty products. The majority (81.5%) selected the product quality as the most important factor. Television and social media were indicated as the main influencing sources; however, only 20% responders reported adverse cosmetics events related to randomly purchased skincare products. This survey data contribute an idea regarding the perception and knowledge of the common people toward cosmetics and cosmetic advertisements so that awareness about rational cosmetics utilization practices can minimize adverse events.

Keywords:

adverse cosmetic events, advertisements, magical cures, perception, survey

Egypt Pharmaceut J 20:173–179

© 2021 Egyptian Pharmaceutical Journal

1687-4315

Introduction

In today's world, the demand of customers and the power of the retailers are tremendously growing due to competitive environment and changing business. Nowadays, in the market, an enormous growth is experienced by the beauty products and has become one of the leading industries in the world. In the Indian scenario too, the consumption and using of cosmetic products is increasing rapidly at an alarming rate. In India, annually the market of cosmetics is reportedly growing by 15–20%. Compared with other cosmetic products, command for skin whitening is driving the trend. As consumer's awareness about their appearance and beauty results in the increasing demand of cosmetic and beauty products in the market. Manufactures are likely to be hostile to identify the need of consumers' requirements across all varieties in cosmetics. Customers buy beauty products based on their predilection, needs, and purchasing power [1].

The use of cosmetics is universal. Beauty products have been traditionally used in order to sustain self-image, beautify faces, and to control physical appearance, to presumably physical attractiveness or altering the appearance. However, the products considered to

treat or prevent skin disease, or affect the structure or function of the body, are considered medicines. Some products like antidandruff shampoos, antiperspirant deodorants, and makeup or sunscreen with sun-protection factor meet the definitions of both drugs and cosmetics since a product can have two intended uses. Such products are regulated either as a cosmetic or as a drug, depending on the composition of the product. Adverse reactions related with cosmetic products are rapidly increasing at an alarming rate by using inferior-quality products or may be due to rapid business-proper safety and toxicity study is not being carried out properly. These reactions can happen immediately after applying or on long-term usage. A number of studies addressed cosmetic use and its adverse events [2]. For instance, a study from Naples' urban reported that, among 2716 females, 98.5% used cosmetic products and of them, 26.5% participants experienced adverse events [3]. Furthermore, a study from Wollo University showed

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

that among 220 female students, 97.3% had a habit of using one or more cosmetics, and 31.8% of the users reported that they experienced adverse events primarily from lotions and body creams [4].

The inferior selection of skincare products is mostly affected by various promotional advertisements. Advertising can be considered as a subset of marketing mix (4 P) that are place, promotion, price, and product. Advertising is an important mechanism to influence the decision of customers to buy a product [1]. Through advertising, manufacturers create an emotional link with customers and it will last long in the mind of the consumers. But some of the manufacturers are doing promotion of misleading health claims and magical cures through advertisement posted on TV, social media, newspaper, etc. If advertising is attractive, then customers pay more focus on that and thereby create a feeling toward the product and that leads to the way of brand promotion. This causes most of the adverse reactions to the consumers those who do not take proper information before applying the product. There are very few studies till date emphasizing the perception of the common people regarding use of cosmetic products. Therefore, the present questionnaire-based survey study was aimed to highlight the use of various skincare products among the common people, perception regarding selection of the products, and the impact of advertisement on this. This will also help to have a better knowledge and understanding of consumer-buying behavior toward cosmetic purchasing. It will serve as baseline information for health education in creating public awareness in the study area and for further study.

Materials and methods

Materials

The study design was an observational, cross-sectional, questionnaire-based study with the insights about the perception regarding purchasing and use of skincare products and the impact of advertisement. A predetermined questionnaire form was developed to evaluate the perception of the common people regarding this.

Methods

This cross-sectional questionnaire-based study was conducted from April 2020 to May 2020. The questionnaire was designed to emphasize some important aspects related to the precaution and preventive measures related to the promotion of misleading health claims and magical cures through advertisements and their adverse reaction of skincare

products among the Indian population. The questionnaire consisted of two parts. One is the demographic criteria, including age, sex, education, occupation, and locality and another is the perception regarding skincare products, its uses, and impact of advertisement on the buying decision of the common people. Google form links were circulated through several online media to get responses from the common people during the study period. After receiving the responses, all the data were presented as frequencies and analyzed as in percentages.

Statistical analysis

Data were calculated using percentage calculating in Excel spreadsheet.

Results

This was a perception-based study on skincare products and the impact of advertisement on it. A total of 200 participants completed the survey questionnaire. The demographic data showed that 131 (65.5%) were female and the rest male. Among the total participants, most, that is, 145 (72.5%) were from the age group of 21–40 years.

The demographic characteristics (Table 1) revealed that most of the respondents, that is, 69 (34.5%)

Table 1 Demographic characteristics of participants

Parameters	n (%) (N=200)
Age	
10–20	32 (16)
21–40	145 (72.5)
41–60	17 (8.5)
Above 60	6 (3)
Sex	
Male	69 (34.5)
Female	131 (65.5)
Others	0
Qualification	
Higher secondary	69 (34.5)
Graduate	60 (30)
Postgraduate	59 (29.5)
Doctorate and above	12 (6)
Profession	
Student	86 (43)
Serviceman	80 (40)
Businessman	5 (2.5)
Homemaker	17 (8.5)
Unemployed	5 (2.5)
Others	7 (3.5)
Locality	
Urban	124 (62)
Semiurban	44 (22)
Rural	32 (16)

held a below-higher secondary or higher secondary degree, about 60 (30%) people had graduate degree, about 59 (29.5%) people had postgraduate, and the rest of them, that is, 12 (6%) were doctorate and above qualified. The present data revealed that most of the responses, 86 (43%) and 80 (40%), have been obtained from the students and employed persons, respectively. The above data show that the maximum respondents, 124 (62%), were from the urban area, the rest 44 (22%) and 32 (16%) were from the semiurban and rural areas.

On the basis of using any cosmetic product, the study result revealed that 122 (61%) use any skincare product in a daily manner, about 42 (21%) are frequent users, and there were very limited responses, 36 (18%) who occasionally or rarely use any skincare products. Most of the respondents, that is, 121 (60.5%), categorized themselves as average spenders and 55 (27.5%) were moderate spenders on buying skincare products.

Figure 1 revealed that the widely used cosmetic products were facewash 70.5% (141), moisturizers 65.5% (131), bodywash 43.5% (87), and sunscreen 43% (86). The survey data also revealed that majority of the respondents, that, 78 (39%), prefer herbal and 45 (22.5%) people prefer chemical products, 19 (9.5%) respondents use homemade products, and others do not have such preference in buying skincare products.

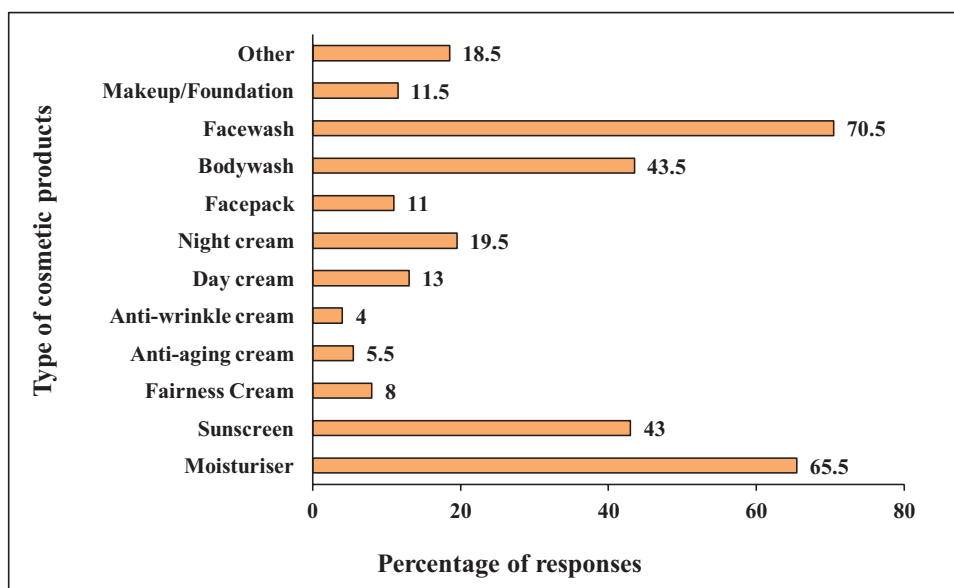
Almost half of the participants, that is, 98 (49%) opined to the fact that they prefer to purchase

skincare products from any permanent store. Among the others, about 55 (27.50%) people prefer to purchase any skincare products from the medical store and shopping mall and the rest 47 (23.50%) preferably do internet shopping (Fig. 2). Majority of the participants 163 (81.5%) opted for the product quality as the most important factor for selecting a skincare product, about 29 (14.5%) look for the brand name, and the remaining 4% considered the product packaging, product price, and advertisement that are the important factors for buying skincare products.

Table 2 revealed the perception of the common people in purchasing skincare products and the data obtained from the present study show that most of the respondents 111 (55.5%) do not change the brand of the skincare products frequently and 136 (68%) collect proper information before purchasing skincare products. Majority of the respondents 137 (68.5%) also opined to the fact that market survey is important before purchasing skincare products. Almost half of the study population 99 (49.50%) stated that promotion and advertisements do not create any impact on buyer's decision of skincare products. However, the rest (18.50%) affirmed the fact and 32% also think that there may be some influence of promotional advertisements of cosmetic products on buyer's decision.

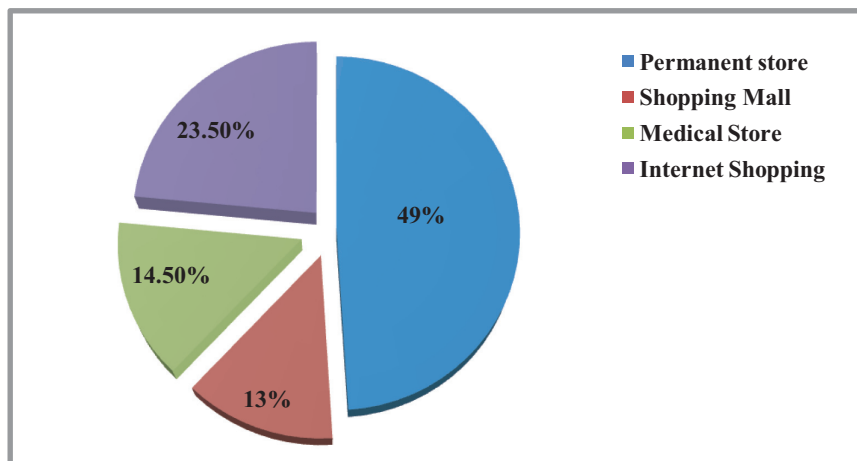
About half of the respondents 104 (52%) agreed that advertisements make shopping easier, among which 17 (8.50%) strongly agreed with it. The rest, about 34 (17%) people, denied to the fact and

Figure 1



Types of skincare products for regular use (n=200).

Figure 2

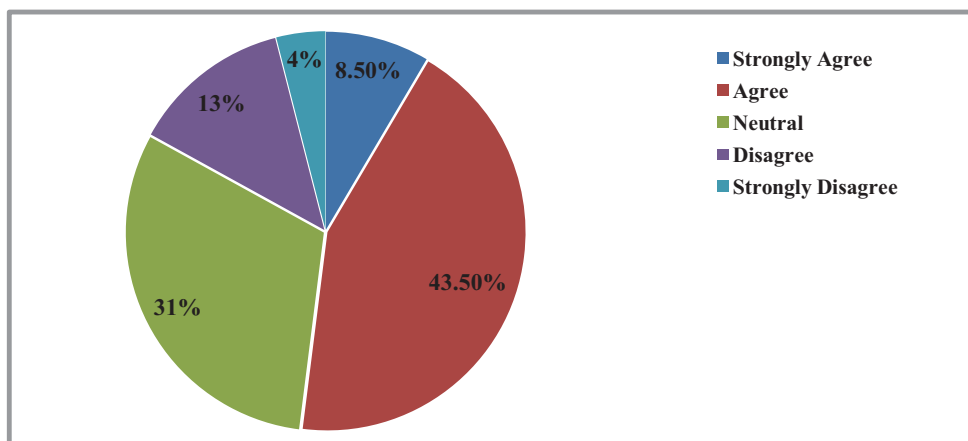


Represents the source for purchasing skincare products (n=200).

Table 2 Perception of the common people regarding skincare products

Perception parameters	n (%)		
	Yes	No	May be
Changing the brand of skincare product frequently	36 (18)	111 (55.5)	53 (26.5)
Collection of proper information before purchasing skincare products	136 (68)	14 (7)	50 (25)
Necessity to conduct a market survey before purchasing any skincare product	137 (68.5)	22 (11)	41 (20.5)
Promotions and advertisements influence buyer's decision of skincare products	37 (18.50)	99 (49.50)	64 (32)

Figure 3



Perception of the common people regarding the influence of advertisement to make shopping easier (n=200).

62 (31%) did not express any specific opinion regarding this (Fig. 3).

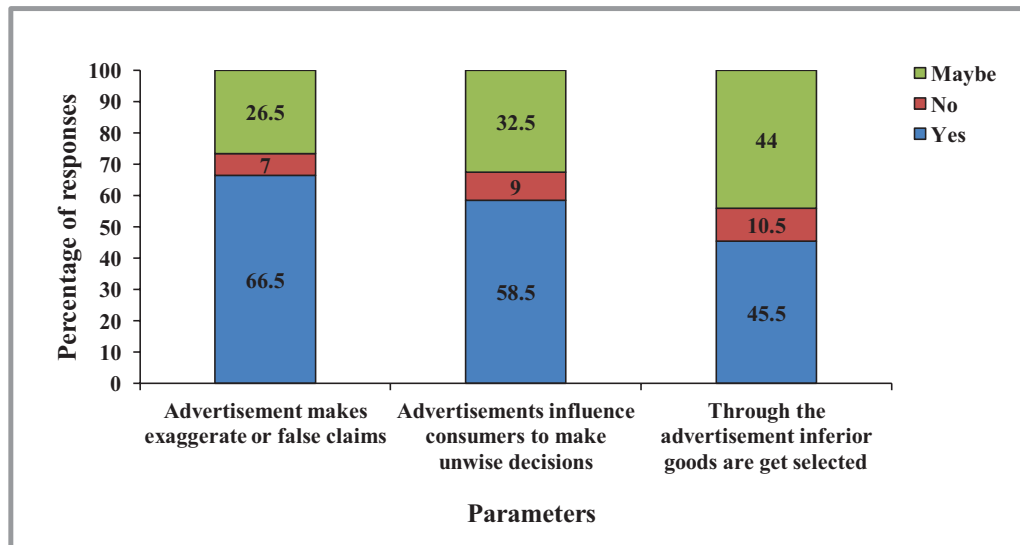
Table 3 demonstrated that among the study population, 84 (42%) and 56 (28%) were encouraged mostly by television advertisements and social media for buying skincare products and the rest 60 (30%) were attracted by either newspaper and magazine or other sources like beauty applications, naturopathy, nutritionists, etc. Many respondents, about 131

Table 3 Sources of advertisement encouraging the buyer's decision on skincare products (N=200)

Source of advertisement	n (%)
Television	84 (42)
Newspaper	2 (1)
Magazine	13 (6.5)
Social media	56 (28)
Others	45 (22.5)

(65.50%), supported that there might be a chance of skin reaction due to random selection of skincare

Figure 4



Perception of common people regarding the impact of advertisement in purchasing skincare products ($n=200$).

products based on promotional advertisements, out of which, about 25% strongly agreed to it. On the other hand, only 3% people denied it and the rest 19% did not share their views upon it.

Another fact revealed from the study result is that most of the respondents 133 (66.5%) agreed that advertisements make exaggerate or false claims; however, about 53 (26.5%) have not set their opinion on it and the rest 14 (7%) denied (Fig. 4). Many of the respondents 117 (58.5%) also opined that advertisements influence consumers to make unwise decisions, about 65 (32.5%) were not sure about it and the rest 18 (9%) disagreed. There was a mixed response regarding the selection of inferior goods through the promotional advertisements. About 91 (45.5%) of the total responses favored that, about 88 (44%) were in a dilemma to put their views on it and the rest 21 (10.5%) completely denied the probability.

Discussion

The present study was conducted to evaluate the using pattern of various skincare products among the common people, their perception regarding selection of any skincare products, and the impact of advertisement. Still now, there are very limited studies that have been conducted for the assessment of the cosmetic usage pattern, the related adverse effect, and the influence of advertisement regarding this. Demographic criteria revealed that among the total 200 participants, 65.5% were female and 72.5% of the respondents were of young-age group 21–40 years, mostly belonging to the urban area. It was really

nice to see that now men are also very interested to visit this area as well because initially cosmetic was a word that was only told to identify something feminine. The hike in awareness in both men and women has increased a lot. Mostly the students and service holders who responded in this survey may be due to their concern about their appearance and beauty, increasing the demand for skincare products. The present study showed that 61% of the common people use the skincare products, mostly facewash, moisturizers, bodywash, and sunscreen on a daily basis, and most of the respondents, about 60.5%, were average spenders on buying skincare products. This trend was supported by a study from Ethiopia, where majority 79.4% of the study population use cosmetic products such as lipstick, lotion, toothpaste, or eye makeup routinely on a daily basis [5]. This was also supported by a recent study from Saudi Arabia where it was reported that the majority of users (> 50%) use deodorant, sunscreen, and night cream on a daily basis, and also makeup products like use lipstick/balm, makeup remover, and eyebrow pencils. Most of the respondents were college or university students [6].

The study results indicated that almost half of the respondents (49%) used to purchase skincare products from any permanent store, 27.50% from the medical store, and the rest 23.50% prefer internet shopping. These data were also relatively similar with a study where 33.2% of the study population usually prefer pharmacy and 27.4% local shops to buy cosmetic products [5]. Another study also revealed that the first preference to buy cosmetic

products was given to the permanent stores followed by any shopping complex and medical shops [7]. One good finding regarding the awareness of the common people was that the majority of the participants (81.5%) opted for the product quality as the most important factor for selecting a skincare product. This was also similar with the study by Desai [7], which also revealed that 85% of the respondents stated that quality is the most important factor influencing the consumer's buying decision. The perception of the common people from the present study also indicated that most of the respondents (55.5%) do not prefer frequently changing the brand and 68% also collect proper information before purchasing skincare products. The majority of the respondents 68.5% also opined to the fact that market survey is important before purchasing skincare products. Similarly the study by Desai [7] revealed that 41% of the respondents always and 54% sometimes used to collect the information before buying cosmetic products. Also, another study by Kameswara [8] revealed that most of the consumers are very much conscious about the particular brand while purchasing their personal care products. One another finding based on Nagapattinam district in Tamil Nadu regarding the information of various brands of cosmetics that most of the participants (96%) have proper information about the existing variety of brands available in the market [9].

In the present study that 52% agreed advertisements make shopping easier, but it was also a positive finding that the common people are much more aware in selecting any skincare product. About 49.50% stated that promotion and advertisements do not create any impact on their preference of skincare product; however, at the same time, 32% stated that there may be some influence of promotional advertisements of cosmetic products on buyer's decision. This was contrary with a study where influence of advertisement was given the first rank in choice of the particular brand of cosmetic [7]. Also, a study from Kualalampur, Malaysia, revealed that 49.1% of the females were affected by cosmetics advertisement [10]. Among the total study population, 42% were encouraged mostly by television advertisements and 28% from social media for buying skincare products and the rest 30% were attracted by either newspaper and magazine or any beauty applications. Anute *et al.* [11] studied consumer-buying behavior toward cosmetic products and found that most of the respondents (50%) were encouraged by television advertisements for buying skincare products. Similarly 36% of the respondents revealed the impact of television on selection of cosmetic brands [7].

Research suggests that young women lacking of self-confidence have also low self-esteem, sometimes due to their complexion and tend to enhance their physical appearance by using cosmetic products. The promises of 'beauty' by most of the promotional advertisements influence consumers to make certain purchasing decisions that benefit the cosmetic companies. The present study data emphasized the perception and awareness of the common people regarding the impact of advertisement on using skincare products. Many of the respondents (65.50%) supported that there might be a chance of skin reaction due to random selection of skincare products based on promotional advertisements and also most of the respondents agreed that advertisements make exaggerate or false claims and influence consumers to make unwise decisions. There was a mixed response regarding selection of inferior goods through the promotional advertisements. A study at University at the West of England revealed that the current users with a considerable minority (17%) reported adverse side effects, whereas in this present survey, data show that 31% responders reported adverse side effects, from that 26.5% reported severe adverse cosmetic events that is much more as compared with the above survey done at West of England. For instance, a study from Naples' urban reported that 26.5% participants experienced adverse events, which is nearly close to the present survey [3]. Another recent study from Saudi Arabia revealed that 16.1% of the participants suffered from cosmetic-related adverse events mostly related with the usage of lotions (51.2%), face creams (27.1%), and deodorants (10.3%) [6]. Similarly a research report also indicated the cosmetics-related wide array of adverse reactions, like irritation, eruptions, urticaria, pigment disorders, photosensitization, hair and nail damage, etc. Approximately 85% of the participants discontinued the product use that improves their conditions [12]. A study from Malaysia reported that 29% respondents have experienced adverse cosmetic events and eczema was found to be the most frequent [13]. A study from Italy also supported the fact that as the cosmetics contain several chemicals may be in a small amount but through this, people are exposed to potentially harmful substances. Their effects are also not clear; therefore, exposure to these multiple chemical mixtures for a longer period of time may cause health hazards and affect the social well-being [14]. Cosmetovigilance is the safety monitoring of public health and a growing interest for the surveillance on cosmetic products. Awareness among cosmetic users, sellers, and other stakeholders may help to make

effective this surveillance to safeguard the health of the commoners.

Conclusion

The present study revealed that the perception about the utility of cosmetic products has changed among people a lot. Even a decade before the use of cosmetics was a luxurious thing to do, but now, people have understood that using a cream at night or washing the face with a cleanser is so mandatory. The concept of beautification or self-maintenance has taken a different meaning altogether in all people, irrespective of sex variation, and has become a part of the daily 'to do' list. It was very good to see from the survey that people are not depending on advertisements like they did before and focusing on the quality of the product. They are very keen of reviews from various websites and also from their known person before using it. So, this study concludes the idea of increasing awareness and also the influence of digital media in the use of cosmetics, irrespective of any sex.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

- 1 Anjana SS. A study on factors influencing cosmetic buying behavior of consumers. *Int J Pure Appl Math* 2018; 118:453–459.
- 2 Accessed at: <https://www.fda.gov/Cosmetics/GuidanceRegulation/LawsRegulations/ucm074201.htm> on dated 06.10.2020
- 3 Di Giovanni C, Arcoraci V, Gambardella L, Sautebin L. Are cosmetics considered safe by consumers?. *Pharmacol Res* 2006; 53:16–21.
- 4 Meharie BG, Ambaye AS, Thaimanot YM. A cross sectional study on assessment of cosmetics utilization and self-reported adverse events among Wollo University, Dessie, North East Ethiopia. *Eur J Pharm Med Res* 2014; 2:49–63.
- 5 Getachew M, Tewelde T. Cosmetic use and its adverse events among female employees of Jimma University, Southwest Ethiopia. *Ethiop J Health Sci* 2018; 28:717–724.
- 6 Shaaban H, Alhajri W. Usage patterns of cosmetic and personal care products among female population in Saudi Arabia: important factors for exposure and risk assessment. *J Environ Public Health* 2020; 2020:8434508.
- 7 Desai KS. A study on consumer buying behaviour of cosmetic products in Kolhapur. *Rev Lit* 2014; 1:1–11.
- 8 Kameswara PR. Consumer attitudes and perception on personal care products and cosmetics at Visakhapatnam. *India Res J Soc Sci Manage* 2015; 5:220–225.
- 9 Priyanga P, Krishnaveni R. Perception of women consumer towards branded cosmetics in Nagapattinam District. *Int J Sci Res* 2016; 5:652–654.
- 10 Kwan VL, Ahmad R, Ahmad R. Cosmetic advertisements: a study on self-esteem and buying behaviour of young women in Kuala Lumpur, *Malay Int J Recent Technol Eng* 2019; 7(5S):261–267.
- 11 Anute N, Deshmukh A, Khandagale A. Consumer buying behavior towards cosmetic products. *Int J Manage Soc Sci* 2015; 3:25–33.
- 12 Lucca JM, Joseph R, Hussain AI, Kubaish Z, Mohammad AI, Maskeen S, Ali Alokaili Z. An observational study on adverse reactions of cosmetics: The need of practice the Cosmetovigilance system. *Saudi Pharm J* 2020; 28:746–753.
- 13 Hadi H, Ai N, Zamli M, Awadh AI, Zafar MZ, Jamshed S. Cosmetic use-related adverse events: findings from lay public in Malaysia. *Cosmetics* 2020; 7:41.
- 14 Panico A, Serio F, Bagordo F, Grassi T, Idolo A, de Giorgi M, *et al.* Skin safety and health prevention: an overview of chemicals in cosmetic products. *J Prev Med Hyg* 2019; 60:E50–E57.