



## Review Article

### TRENDS IN COSMETIC PACKAGING: A REVIEW

P. Muralidhar \*, P. Nagendra, B. Swetha, E. Bhargav

Department of Pharmaceutics, Raghavendra Institute of Pharmaceutical education and research (RIPER), Ananthapuramu, Andhra Pradesh, India

\*Corresponding Author Email: muralip2016riper@gmail.com

Article Received on: 23/10/16 Revised on: 20/11/16 Approved for publication: 02/12/16

DOI: 10.7897/2230-8407.0712136

#### ABSTRACT

As the market is evolving rapidly and globalization is at its peak we can perceive lot of cosmetics emerging in the market having attractive packaging styles. Besides its designer looks its handy and compact nature proves it to be more consumer friendly. Consumer preference affects proportionately to the upcoming trends. As the preferences change, the trend takes a different direction in the cosmetic sector bringing up a lot of competition among the various brands in the market. There are several types of Packaging materials available and suitable for a variety of cosmetic products. Materials used commonly are Glass, Plastics, metals etc. The material, shape, color and durability of packaging is the most important part of the branding. With the help of advance technologies it's possible to make the packaging more attractive as well as more easy to use. In this review, the aim is to focus on the various trends in packaging of lip balms, lipsticks, eye cosmetics, hair care products, perfumes, deodorants, face powders and nail lacquers.

**Key Words:** Globalization, consumer, Packaging materials.

#### INTRODUCTION

Now a days, cosmetics are considered to be one of the essential commodities of life. It is the fulcrum of first moving consumer's good sector. Cosmetics is defined as an item intended to be rubbed, poured, sprinkled, sprayed on, introduced into or applied to the human body or any part thereof for cleansing, protecting, beautifying promoting attractiveness or altering the appearance.

#### Consumer preferences

Whole packaging industry revolves around this essential element i.e. consumer preference. To provide product with different identity and place in the market is a very difficult task, keeping consumer preferences in mind we can go ahead in designing the packaging style and the packaging material as well. A consumer prefers to buy a product which has a package which is portable, perform its function as expected, that means it should protect the product and give all information which a consumer should know regarding the product. It should be compact and convenient so that it can fit into carry bags without inconvenience, eco-friendly nature is also a concern for manufacturers now a day in order to keep environment safe. All these factors affect the market value of the product, so keeping every factor in mind packaging material is given a style to increase its demand and make it more attractive.<sup>1-5</sup>

#### Components of packaging material used in cosmetics

- Glass
- Plastics
- Metal
- Fibrous material (tertiary packaging material)

#### Levels of packaging

Primary packaging- in direct contact with the product

Secondary packaging- in direct contact with primary package

Tertiary packaging - in direct contact with secondary package

**Plastics:** Plastic containers for cosmetic products are primarily made from the following polymers: Polyethylene, Polypropylene, Polyvinyl chloride, Polystyrene Polyethylene methacrylate, polyethylene terephthalate etc.

#### Types of Plastic

- Thermoplastic
- Thermosetting

#### Thermoplastic Type

This type of plastic gets softened to a viscous fluid on heating and hardens again on cooling. The hardness influenced by the degree of cross linkage or intermolecular attraction between the long chain molecules.

**Thermosetting Type:** This type of plastic not gets softened to a viscous fluid on heating.

#### Advantage of Plastic

- Light in weight.
- Poor conductor of heat.
- Sufficient mechanical strength.
- Transported easily.
- Unbreakable and good protection power.

#### Disadvantages

- Permeable to water vapor and atmospheric gases.
- Cannot with stand heat without softening or distorting.
- Absorb chemical substance, such as preservatives in solution.
- Interaction with product and leaching are the main issues.

### Metals

1. Collapsible tubes
2. Metal containers
3. Metal foil

### Advantage of Metals

- They look sophisticated.
- They are impermeable to light, moisture, gas.
- They are light in weight as compared to glass containers.
- Labels can be printed directly on to their surface

### Disadvantage of metals

- They are expensive.
- They may shed metal particles into products.
- They react with certain chemicals of drug.

### Glass

#### Advantages of glass

- Comparatively cheaper
- They are transparent.
- They are neutral after proper treatment.
- Good protection power.
- They can be easily labeled.

#### Disadvantages

- Glass is fragile.
- Glass containers are heavy

### Paper and board

#### Composition

Paper and board are composed of cellulose obtained by the mechanical or semi chemical treatment of fibers dried from various sources like wood, hemp, cotton, etc. Mostly they are papers, corrugated sheets, cartons or shippers.

In some case waste and regenerated paper is used.

Apart from paper other fibers are organza and silk which are use gift wrap the cosmetic product so that they look more attractive

### Widely used materials in cosmetic packaging

#### Plastic

- Polyethylene
- Terephthalate
- Poly vinyl chloride
- HDPE
- Polypropylene
- Polycarbonate

#### Metals

- Aluminum
- Stainless steel(304) and (316)
- Tin
- Alloys of aluminum

#### Fiber

- Paper bag
- Corrugated fiber board
- Cartons
- Shippers
- Organza
- Silk

Green packaging is also another side of research which encourages the use of biodegradable material for healthy environment.

### Lip balms<sup>6,7,8</sup>

- Generally seen in round containers made up of polypropylene (PP) (Figure 1)<sup>1</sup>
- Even the cap is made up of polypropylene.
- Now days they are available in the form of sticks made up of (PP) and they are more preferred due to the ease of application.
- They are packed in plastic containers having a shape of fruits or chocolates to gain teenagers attention and interest.

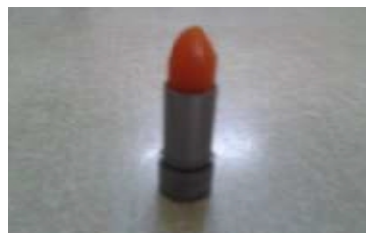


Figure 1: Lip balm

### Lipsticks<sup>9,10</sup>

- From the beginning plastic case were used in lipsticks. (Figure 2)<sup>10</sup>
- From styrene to high grade PET (Polyethylene terephthalate) are seen in the market.
- Among metals brass and aluminum are widely used.
- Instead of sticks these are packed in PET containers, available in round, square and rectangular shape and it consist of a brush for its application.
- Liquid lip colors are also available now days. Mostly PET containers are used; these are usually transparent for determining the color shade.
- In these containers brush is present at the tip of the stick, which is dipped inside the bottle containing color.
- The cap of the lipstick can or cannot be transparent, depending on its photosensitivity.
- Metallic caps are also used.
- Few of them have magnetic seal, which provides a better lock and protection to the lipstick.



Figure 2: Lipstick

### Eye cosmetics<sup>11,12,13</sup>:

- Kajals
- Eyeliners
- Eye shadows &
- Under eye creams

### Kajals

- Kajals are seen in variety of forms such as pencils, thick sticks, sleek sticks called as twisters and roll sticks are also there similar as lipsticks. (Figure 3)<sup>14</sup>
- Disadvantage with thick sticks and pencil is that, it needs sharpener every time.

- Twisters don't need sharpeners plus their sleek design makes them handy. But they break very easily.
- Roll sticks don't need sharpeners and they don't break as well.
- But the consumer's choice can vary depending on their comfort level with respect to a particular type of design.
- In order to reduce the efforts of carrying sharpener all the time with the pencils, modifications are done on the cap of the kajal by fitting a sharpener to itself.
- Eyeliners were conventionally marketed in glass bottle with a brush inside it.
- Trend has changed a lot and eyeliners in plastic containers are preferred highly, the modification with the brush has itself compelled consumers to opt for the finer version. The tip is hard and firm compared to conventional form which makes application easy.
- Sketch pen kind of eyeliners is latest in the market which looks like sketch pen and possess a firm tip.
- Round containers containing gel eyeliners are also new in markets which are available in PET container along with a plastic brush.



Figure 3: Kajal

#### Eye shadows

- Compressed powders similar to face powder and rouge.
- Mostly packed in plastic containers of square, oval, round and rectangular shape having a brush in it.
- Made up of ABS (acrylonitrile butadiene styrene), PP, and PETG & ALUMINUM.
- Containers with multiple bases are also available in which with more colors and it has a separate place for brushes

#### Under-eye creams

- These kinds of containers containing under eye creams have a nozzle at the tip which makes the application easy under the eye.

#### Shampoos lotions body-wash and hair-oil containers<sup>15</sup>

- Basically HDPE, PVC, PET are used in jars and bottles.
- Glass is not much preferred now days.
- Aluminum is also used in making stylish bottles containing hair colors.
- The shape of the bottle is simply changed to get consumer's attention.
- The lid used are of various types like, flip top, press top, and screw caps
- Solid lotions are packed in tin containers.
- Impregnated tissues are packed in PVC packet.
- Dry shampoos are marketed as sprays.
- According to the target the shape of plastic container is decided.

#### Perfumes and deodorants<sup>16</sup>

Perfumes are generally packed in glass bottles



Figure 4: Perfumes

- Beautiful look is given to the glass to make it appealing to the consumers. (Figure 4)<sup>1</sup> So it's just the glass and steel which are widely used in the perfume packaging.
- On and off perfume atomizers, bulb atomizers & refill purse atomizers are also seen in the market.
- For essential oils droppers are also available.
- Various perfume caps are used like leather perfume caps, aluminum caps, wooden perfume caps and zinc alloy.
- Solid perfumes are also available in containers similar as face powder's.
- Mostly made up of high grade plastic and aluminum alloy.

#### Deodorants

- Are of three types- Sprays, Roll-on and Sticks.



Figure 5: Deodorant

- Sprays are widely packed in aluminum containers to prevent is breakage like glass.
- Sticks and roll-ons are packed in plastics.
- Roll-ons and sticks made the application of deodorant easy. (Figure 5)<sup>1</sup>

#### Face powders<sup>17</sup>

- Are basically marketed in the same fashion as earlier, only slight modifications are made in its packaging.
- The shape of the plastic keeps changing and more compartments are introduced to keep every individual part of face powder, i.e. compressed powder in upper case and sponge in lower case.

#### Nail lacquers<sup>18</sup>

- Basic container is glass since many years. (Figure 6)<sup>1</sup>
- Only the shape is modified along with the shape of plastic cap.

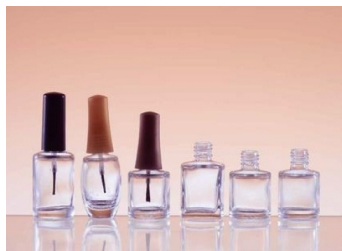


Figure 6: Nail lacquer

### Tertiary packing<sup>19</sup>

- Cosmetic set has proper racks at proper place to keep the desired product. It prevents the inconvenience while carrying lot of cosmetics separately.
- These are made up of the plastics.
- Pouches made up of PVC, organza and silk are used to carry cosmetics.(Figure 9)
- It gives a very good appearance to the cosmetic packaging from marketing point of view
- Biodegradable packaging is the area of interest for manufacturers International brands like GUCCI use plastazote as the main stream material. Known for its high quality and cushion effect. They are odorless light weight, resistance to water and chemicals, strong, flexible, and slightly affected by U.V
- For carrying the packed product corrugated sheets are used and for transportation cartons or shippers are used.(Figure 7)<sup>20</sup>



Figure 7: Corrugated boxes

### CONCLUSION

There is clear association between packaging of a product, where glass, metal and plastic packaging are associated with the generic looking of the cosmetic products. The packaging material used must be good in appearance as well it should be compatible with the contents. According to the need of the cosmetics, material can be selected and used.

### REFERENCES

1. Shivsharan U.S, Raut E.S. Packaging of cosmetics: A review. *Journal of pharmaceutical and scientific innovation* 2014; 3(4): 286-293.
2. Nageen Arora, Shilpi Agarwal. Latest Technology Advances in Cosmeceuticals. *International Journal of Pharmaceutical Sciences and Drug Research* 2012; 4(3): 168-182.
3. Kumar Dileep, Kumar Sarvesh. Skin care in Ayurveda: A literary Review. *International research journal of pharmacy* 2013; 4(3): 1-3.

4. DainoraGrundey. Functionality of product packaging: surveying consumers attitude towards selected cosmetic brandsi. *Economics & Sociology.* 2010; 3(1): 87-103.
5. MertTopoyan. Packaging value of cosmetic products: An insight from the view point of consumer. *International Conference on Value Chain Sustainability* 2008; 1(5): 183-190.
6. Renata Dobrucka. Recent trends in packaging systems for pharmaceutical products. *Scientific Journal of Logistics* 2014; 10(4): 393-398.
7. Patel Rakesh.P, Patel Yogesh.B. Outline of pharmaceutical packaging technology. *International research journal of pharmacy* 2010; 1(1): 105-112.
8. ManojShivajiKumbhar, Naresh HiraramChoudhary. Tamper evident pharmaceutical packaging – needs and advances. *International Journal of Pharmaceutical Sciences Review and Research.* 2012; 13(2): 141-153.
9. Mehta Kunal C, Akhilesh D. Recent Trends in Pharmaceutical Packaging: A Review. *International journal of pharmaceutical and chemical sciences* 2012; 1(3): 1282-1292.
10. Deshmukhswati, Sutarmanisha. Formulation and evaluation of natural lipsticks prepared from bixaorellana seeds and beta vulgaris root extract and their comparative study. *International Journal of Pharmacy and Pharmaceutical Sciences* 2013; 5(4): 68-70.
11. Vikaspareek, AlokKhunteta. DR. Pharmaceutical packaging: current trends and future. *International Journal of Pharmacy and Pharmaceutical Sciences* 2014; 6(6): 480-485.
12. Nikita Wanjari, Jyotsna Waghmare. A Review on Latest Trend of Cosmetics-Cosmeceuticals. *International Journal of Pharma Research & Review.* 2015; 4(5): 45-51.
13. GhanshyamBalkrishnaJadhav, Amar GangadharZalte. Advances in pharmaceutical packaging. *World journal of pharmacy and pharmaceutical sciences* 2014; .3(5): 194-204.
14. Ernest W Flick. *Cosmetic and toiletry formulations.* 2<sup>nd</sup> edition. Noyes publications;1992.
15. SwarnlataSaraf, ManjushaJharaniya. Herbal hair cosmetics: advancements and recent findings. *World Journal of Pharmaceutical Research* 2014; 3(2): 3278-3294.
16. NitaigourPremchandMahalik. Review Advances in Packaging Methods, Processes and Systems. *Challenges open access* 2014; 5(5): 374-389.
17. Paola Perugini, BenedettaBrisco. Article Packaging Evaluation Approach to Improve Cosmetic Product Safety. *Cosmetics open access* 2016; 3(32): 2-12.
18. ManukondaKeerthi, Lakshmi Prasanna. J. A Review on Packaging for Different Formulations. *Asian Journal of pharmaceutical sciences and research* 2014; 4(3): 141-151.
19. NityanandZadbuke, SadhanaShahi. Recent trends and future of pharmaceutical packaging technology. *Journal of Pharmacy and Bioallied Sciences* 2013; 5(2): 98-110.
20. cosmetics-products-packaging-boxes.html [homepage on the Internet]. Available from: <http://www.klpackagingindustries.com/cosmetics-products-packaging-boxes.html>

### Cite this article as:

P. Muralidhar, P. Nagendra, B. Swetha, E. Bhargav. Trends in cosmetic packaging: A review. *Int. Res. J. Pharm.* 2016;7(12):1-4 <http://dx.doi.org/10.7897/2230-8407.0712136>

Source of support: Nil, Conflict of interest: None Declared

Disclaimer: IRJP is solely owned by Moksha Publishing House - A non-profit publishing house, dedicated to publish quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IRJP cannot accept any responsibility or liability for the site content and articles published. The views expressed in articles by our contributing authors are not necessarily those of IRJP editor or editorial board members.