

SOCIAL MEDIA IN AESTHETIC DERMATOLOGY- INDIAN SCENARIO

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DOI: 10.47750/pnr.2022.13.S01.278

Abstract

In the 21st century, the demand for cosmetic procedures is on the rise. Social media (SM) trends add momentum to the increased interest in the people. The information available on social media may vary drastically from educational material to advertisements or individual experiences. As the reach of social media such as facebook and instagram continues to expand, the dermatologist should be ready to tackle the increase in demand for cosmetic procedures, as well as the misinformation or the misinterpretation of the content on social media by these patients. Hence this study has been taken up to observe the current usage and influence of social media for skin related concerns, and impact on the public to use a new product or undergo a new procedure.

Keywords: Social media, Aesthetic Dermatology, Influence, Instagram, credibility

Background

The acceptance and awareness of aesthetic dermatology is on the rise. Social media, which has now become an integral part of one's life, has become a marketing platform for both dermatologists and cosmeceutical companies. There are currently no studies in India correlating the impact of these advertisements for considering the use of skin care products or to undergo a cosmetic procedure.

Introduction

In the 21st century, the demand for cosmetic procedures is on the rise. Social media (SM) trends add momentum to the increased interest in the people. The information available on social media may vary drastically from educational material to advertisements or individual experiences. As the reach of social media such as facebook and instagram continues to expand, the dermatologist should be ready to tackle the increase in demand for cosmetic procedures, as well as the misinformation or the misinterpretation of the content on social media by these patients.

As of 2020, about 448 million people use social media actively across India. YouTube and Facebook account for the largest penetration, at 89 percent and 76 percent respectively, followed by whatsapp, instagram and then twitter.¹

In the present day, dermatologists and cosmeceutical companies are investing highly on social media marketing. They are not only advertising their brand or clinic, but also organising several interactive sessions online. With the ongoing covid pandemic, social media stands as the most potent marketing tool for the skin care industry.

In the world of Instagram, Facebook and Twitter, several actors, celebrities and social media influencers are discussing their skin routines, personal experiences with dermatologists and procedures and also are promoting skin care brands that are being received very well in the community. Promotions from celebrity accounts can also affect public interest significantly.

One article found that online search interest for dermal fillers increased substantially after United States (US) celebrity Kylie Jenner announced she had received lip filler injections.²

The understanding of the current social media trends can help dermatologists to plan their treatment plans, inventory and even training and educational material according to the public demand. It also helps the cosmetic market to come up with products that are appealing to the users.

Hence this study has been taken up to observe the current usage and influence of social media for skin related concerns, following dermatologists on social media and impact on the public to use a new product or undergo a new procedure.

Objectives:

Primary objectives:

1. To understand the influence of social media to undergo an aesthetic procedure in the study population
2. To know the influence of social media to purchase skin care related products
3. To analyse the credibility of information regarding cosmetic/ aesthetic procedure and skin care products

Secondary objectives:

1. To estimate the percentage of satisfaction and side effects profile of the skin care products brought through social media information.

Methodology:

A quantitative observational cross sectional online survey was conducted, using convenience sampling. Both men and women of more than 18 years of age, belonging to Indian nationality were included in the study. The exclusion criteria were: practicing dermatologists, or age less

than 18 years. Sample size calculation was conducted using inputs determined based on a study of a similar topic in Saudi Arabia.⁴ With 9% relative precision and 5% attrition, sample size was calculated to be 530. A questionnaire was created using google forms and it was distributed online via email and whatsapp over a period of 4 months, after the approval of the Institutional Ethics Committee. The entries were collected and analysed.

The participants were fully informed about the purpose of the study and an informed consent was obtained in the survey. The respondents have participated voluntarily and were able to leave the study at any given time.

After a thorough review of literature on the topic, twenty six questions were included in the questionnaire regarding the demographical factors, the use of social media, the nature of skin related accounts followed by the respondent and the influence of the same for purchasing skin care products or undergoing aesthetic treatments. Questionnaire was validated by three experts in this field

Statistical analysis:

Data were cleaned and those with missing values being removed before statistical tests were carried out. Statistical analysis was done using the SPSS 24 statistical software package (IBM Inc., Armonk, USA). Results were presented as mean frequencies and percentages for qualitative data. A chi-square test was used for comparing qualitative variables between groups. A probability value of less than or equal to 0.05 was considered statistically significant

Results:

A total of 612 responses were obtained after taking proper informed consent. The results were analysed in the following sections

Section I: Demography

1. Age
2. Gender
3. Marital status
4. Occupation
5. Residence

Section II: Effect of social media on daily life

1. Reliable source of info
2. Hours spent on SM
3. Most used SM platforms

Section III: Social media for skin care

1. Modification in skin care through SM information
2. Influenced by SM information
3. Dermatologist number followed
4. Main reason to follow dermatologists
5. Proper consultation after seeing them on SM
6. Consistency of SM information with consultation

Section IV: Skin care products

1. Purchased
2. Improvement
3. Side effects
4. S/E mentioned

Section V: Non Surgical cosmetic procedures

1. Undergone any
2. Mention which one
3. Considering any after SM information

Section VI: Influence on the community

1. Family/friend influenced by your SM knowledge
2. Effort to analyse
3. Rate the credibility
4. Google review

SECTION I: Demography

Among all the participants, around 472(77.1%) were in the age group of 18-30 years, followed by the 30-40 year age group, which comprised 92(15%) of the study population. The 40-50 year and more than 50 year age group comprised of 4.4% and 3.4% respectively.

Around 324 (52.9%) study participants were female and 288 (47.1%) were male. 66.6% were married and 33.3% were unmarried.

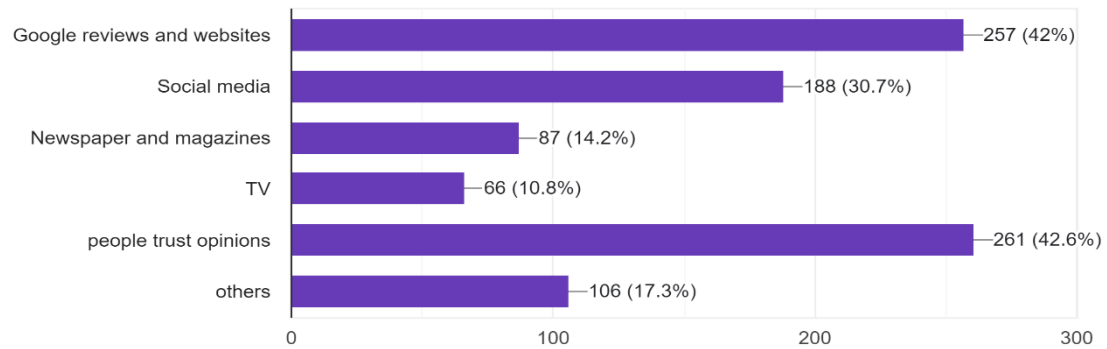
Out of the 612 participants, more than half were professionals, comprising 378(61.8%) of the study population. This was followed by the unemployed group 155(25.3%), semi-professionals 39(6.4%), semi-skilled and unskilled workers.

Around 241(39.4%) were from tier-1 cities, 204 (33.3%) from tier-2 cities, and the rest were from tier-3 and 4.

Section II: Effect of social media on aesthetic dermatology

When questioned about what the participants consider a reliable source of information for cosmetics or cosmetic procedures, 113(18.5%) vouched for people's trusted opinion, while 96(15.7%) relied on google reviews and websites. 67(10.9%) of the participants relied on social media, followed by television (4.2%) and newspapers and magazines (4.1%). But majority of them relied on two modes 129(21.1%) as source of information preferably people trust opinion and google reviews. Around 86(14.1%) gathered information through all platforms.[figure 1]

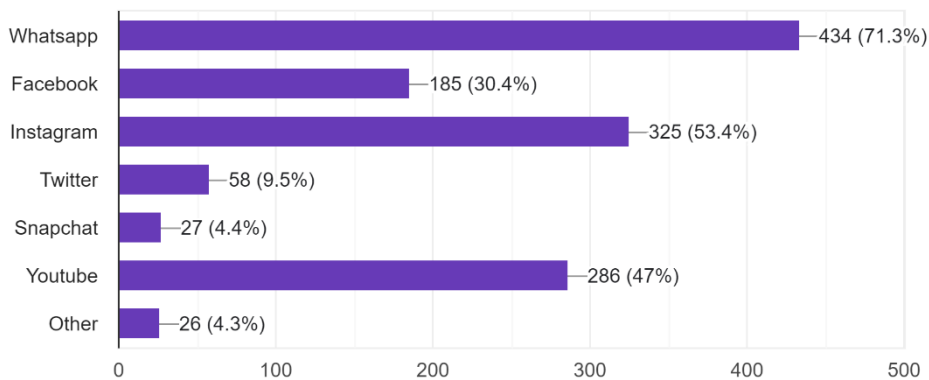
Figure 1 – Bar chart showing various platforms used to gather information regarding cosmetic treatment



The results of the study showed that approximately 48.3% of the study population spend less than 2 hours on social media everyday, 40.8 % spend two to five hours and about 10.9% spend more than five hours per day on these applications.

The most frequently used social media application according to this study is whatsapp (71.3%), followed by instagram (53.2%), youtube (47%), facebook (30.4%), twitter(9.5%) and snapchat(4.4%). [figure 2]

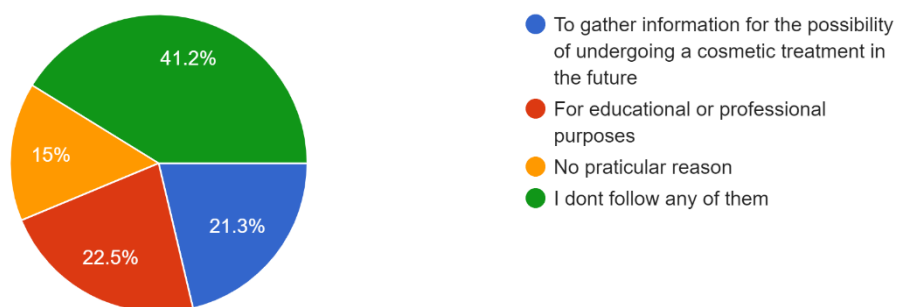
Figure 2: Bar chart showing various social media application used by participants in this study



Section III: Social media for skin care

According to the study, around 35% of the study population have made dietary or exercise modifications based on the information obtained from social media. 27% have bought over the counter cosmetic products or followed home remedies that they came across online. 10% of the study participants purchased oral supplements that they found on social media. Around 30% did not follow any skin care related advice given on these social media platforms. [figure 3]

Figure 3: Pie chart showing various reasons for which participants use social media platform



Section IV: Skin care products

On the knowledge acquired through social media majority of the people has purchased Over the counter products for their skin care in all TIER cities followed by diet modification and exercise.p value(p0.002).

Females 34(54.8%) has purchased more OTC products than men whereas men 23(67.6%) has adopted more of exercise modification than females ,pvalue(0.001)

Among the social media platform instagram has influenced more when compared to other platforms in habit modification like OTC products purchase, diet modification, exercise, starting oral supplementations.p value(0.003)

Around 44.8% of the study participants follow dermatologists on social media for skin care related information. The rest of them rely on non dermatologist bloggers/ influencers/ youtubers (30.7%), friends(20.1%) and celebrities(4.4%).

Out of the participants that follow dermatologists, 85.8% follow around 1-5 dermatologists, 11% follow 5-10 dermatologists and around 3.4% follow more than 10 dermatologists.

The influence of dermatologist 110(40.0%) among people regarding skin care and aesthetic treatment was more in TIER 2 cities110 (40.4) whereas non-dermatologist (bloggers/you tubers/influencers)85(45.2%) has dominated the dermatologist in influencing people to undergo aesthetic treatment in TIER 1 cities. These findings were stastically significant with P value(0.014)

When questioned about the reason for following dermatologists, around 38% claim that they do so to gather information for the possibility of undergoing a cosmetic treatment in the future and another 39% do so for educational and professional purposes.

Females 120(63.8%) were relatively more influenced by the information given by non dermatologist when compared to men68(36.2%) whereas men73(59.3%) have belived more about the opinion given by friends and family members when compared to women 50(40.7%). This findings has a statiscal significance with p value(0.001). In contrast dermatologist has equally influenced men136(40.5%) and women 139(50.5%) in undergoing aesthetic treatment.

About 29% of the population that follow dermatologists have had proper consultation with a dermatologist after knowing about them on social media.

The percentage of people who had a proper in-person consultation with dermatologist after knowing about them in social media were higher in TIER 2 cities 63(35.6%), P value(0.00) than TIER 1 and TIER 3 cities.

When these participants were asked if the information they acquired on social media advertisements were consistent with their in-person consultation, their response was showin in the following table

Table -1: Showing various satisfaction levels of the participants after in-person consultation.

Percentage of satisfaction	Percentage of participants
< 25% satisfied	27.8%
25-50% satisfied	29.8%
50- 75% satisfied	21.2%
75-100% satisfied	9.3%
Not satisfied	11.9%

In the study population, 46.1% purchased skin care products that they came across on social media platforms. When asked about their satisfaction with these products, the responses were as below (Table 2)

Table -2: showing percentage of satisfaction after usage of products through online purchase

Percentage of satisfaction	Percentage of participants
< 25% satisfied	27.58%
25-50% satisfied	37.9%
50- 75% satisfied	26.3%
75-100% satisfied	8.2%

Around 17.7% of the participants that purchased the products have reported side effects such as acne, redness or pigmentation.

In purchasing skin care products instagram 44(15.6%) p value (0.00) has influenced the people more when compared to other social media platforms. People also uses more than two social media platforms to gather information before purchasing skin care products 103(36.5%)

Section V: Non Surgical cosmetic procedures

The results of this study showed that only 13.6% have undergone any non surgical cosmetic procedures such as botox, fillers, peels, lasers, etc in the past. When they were questioned further about what type of cosmetic procedure interested them on social media to consider undergoing a cosmetic procedure, 78% answered that it was the non-surgical cosmetic procedures such as peels, lasers, acne scar treatments, botox, fillers and body contouring. 7.7% were interested in surgical options such as liposuction, breast augmentation and rhinoplasty and 14.2% were interested in both surgical and non-surgical cosmetic treatments.

Instagram has been the prime among social media in influencing the people to undergo nonsurgical cosmetic procedures 28(18.1%) with significant p value(p.023). This is in contrast to surgical cosmetic procedures where people had gathered information from all social media platform before undergoing the procedure7(46.7%)

Social media information has influenced people living in TIER 1 cities to under non surgical procedures 85(54.8%) more than surgical procedures 6 (40.0%) where people in TIER 2 cities had undergone surgical aesthetic treatment than nonsurgical procedures. These findings has a statistical significance with P value(0.00)

Section VI: Influence on the community

According to the results, 22.6% of the study population encouraged family members or friends to undergo any dermatological procedure or purchase skin care products based on their knowledge acquired through social media. 47.9% of the participants claim that they have taken some effort in analysing the truth in the messages related to skin care (procedures/products) on social media, while the rest did not.

When asked to rate the credibility of dermatological information acquired through various platforms, the results were as follows: very satisfied 7.2%, satisfied 23.4%, OK 56.5%, unsatisfied 10%, very unsatisfied 2.9%.

When asked to rate about the credibility of information available in social media regarding aesthetic treatment in scale of very satisfied to very unsatisfied, the percentage of satisfaction level was high among people living in TIER 1 cities 18 (40.9%), whereas people in TIER 2 cities were unsatisfied 26(42.6%) about the credibility of information about aesthetic treatment available in social media. These findings had a statistical significance with p value 0.001

Among the study population, 20% have given google reviews about your experience regarding a skin related consultation/procedural treatment in the past.

people living in TIER 2 cities 41 (34.2%) p value (0.003) had given more google reviews regarding their experience about skin related consultation and procedural treatment. People in the age group 18-30 years 83(69.2%) p value (0.004) have given more google review about their experience after undergoing aesthetic treatment.

Discussion:

In the past few years, social media and the internet have grown in popularity, developing as a new communication tool between patient and physician. The analysis of the results showed usage of SM was more with people from tier 1 city to gather information about aesthetic treatment. People trust opinion was leading by only 0.6% than Google review (similar results seen in study by DeBord LC et al¹) as reliable source of information for cosmetic treatment, this shows that SM advertisement and google reviews plays a major role in influencing dermatologist's practice. Study by Mohammed albeshri² also showed the preferred way to consult a dermatologist for the skin related issues was through friends and family members followed by social media. In his study twitter (27.9%) was preferred social media platform followed by instgram (24.6%). In our study whatsapp followed by Instagram was the social media options preferred. Study by Mohammed albeshri and our study proved Instagram was the most used social media platform to gather information before undergoing non-surgical cosmetic treatment. Instagram being a visual platform had influenced around (30.5%)people to undergo non surgical cosmetic procedures safer seeing post- pictures of various aesthetic producers. Same finding was noticed in Mohammed albeshri² and Hopkins study³

Unmarried female population has spent more time in SM and have tried various skin care products through SM information. Female population also had major interest in undergoing non surgical aesthetic treatment especially laser hair reduction. Study by Alghonaim⁴ also showed similar results. Diet modification(36%) and exercise(36.7%) were the most common changes made in the people's life style after gathering information from dermatologist advice in SM. Study by Ghada Alhayaza⁵ in Saudi arabia showed the participants equally were interested in medical and life style contents. In Ghada Alhayaza study , they have also analysed the dermatologist perspective on social media influence in their practice. In that study it was found senior dermatologist had a active social media account and majority of them believed SM influence impacted their day to day practice. The purpose of using SM by dermatologist was mainly for purpose of self marketing, branding and educational purpose⁵.

Non dermatologist (30.7%) equally influenced people to undergo cosmetic treatment in SM. This result was comparable with Arab et al study.⁶

More than half of study population(52.1%) didn't take an effort to analyze the credibility of information in SM. This attitude is the main reason for success of all fake practitioners and manufactures of fake products. Despite the benefits and advantages of SM for seeking medical advice or treatment, legal liability and possible risks of sharing information online should always be kept in mind.

Conclusion:

With the ongoing covid pandemic, social media stands as the most potent marketing tool for the skin care industry. With 80% of people searching the Internet for health information, there is an onus on doctors to maintain a presence on SM wherever possible to dispel misinformation being circulated and provide evidence-based knowledge. Although there are many risks associated with using SM in healthcare and dermatology specifically, the opportunity to promote public health, patient education, and professional interactions is impactful and should not be missed. Professionalism , moral, legal and ethical consideration to be maintained while engaging in SM contents. The available literature on how social media influences dermatology practice is still scarce, and further research is needed

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