Influence of social media on people seeking dermatology information – A cross sectional questionnaire study

[1]Aishwarya Naik, Junior resident, department of dermatology venereology and leprosy, Hassan Institute of medical Sciences, Karnataka, India.

[2]Vinay K Nirvanappa, Assistant professor, department of dermatology venereology and leprosy, Hassan Institute of medical Sciences, Karnataka, India.

[3]Parvathi C. Nagesha, Professor and HOD, department of dermatology venereology and leprosy, Hassan Institute of medical Sciences, Karnataka, India.

[4]Ravikumar B C, Professor and Director, department of dermatology venereology and leprosy, Hassan Institute of medical Sciences, Karnataka, India

[5]Suresh M R, Associate professor, department of dermatology venereology and leprosy, Hassan Institute of medical Sciences, Karnataka, India

[6]Umadevi H R, Senior resident, department of dermatology venereology and leprosy, Hassan Institute of medical Sciences, Karnataka, India

Corresponding Author: Parvathi C. Nagesha, Professor and HOD, department of dermatology venereology and leprosy, Hassan Institute of medical Sciences, Karnataka, India.

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Abstract

Background: social media are an important source of skin and hair related information in today's world. This load of relatively easily accessible information can bear a huge impact on one's health. The scanty regulation on the content, lack of reliability and accuracy can lead to misinformation and wrong management. This study was conducted to know the influence of social media regarding dermatology information.

Objective: To describe the influence of social media on respondents seeking dermatology related information and treatment.

Methods: A validated self-administered structured questionnaire was posted on social media. The data was collected and analyzed after reaching the sample size.

Results: Out of all, 63.6% of respondents preferred to view content from dermatologists, whereas 42.4% also preferred content created by skin care bloggers. However, 44% did not check a content creator's

qualifications before viewing their content. When asked if they do or would follow advice on skin care on social media, 32% replied yes to an influencer and 85% replied yes to a dermatologist. When asked if they would rather seek information from a non-dermatologist influencer who has more followers, than from a dermatologist with lesser followers on social media, 64% replied no, 30% replied maybe and 6% replied yes.

Conclusion: The respondents were using recommend dations by non - dermatologist influencers but would rather follow recommendations from dermatologists on social media. It would be appropriate to make it mandatory to display one's qualification for posting dermatology content.

Keywords: Dermatology, skin, social media, internet

Introduction

Social media are defined as websites and applications that enable users to create and share content online, forming a network of information. With the rise of social media and over half of India's population using these, there is a vast amount of information being circulated online. With respect to dermatology, there are innumerable social media influencers and dermatologists who are circulating skin and hair related information.

Social media influencers represent a new type of independent, third-party endorsers who shape an audience's attitudes through blogs, tweets, and the use of other social media channels. There are also well qualified dermatologists who are extending their presence on social media.

With so much information being available at one's convenience, there are bound to be shifts in the attitude and perception of people about skin health, skin disorders, treatment modalities and the tendency to get influenced by non-dermatologists.

The scanty regulation on the content, lack of reliability and accuracy can lead to misinformation and wrong management.

The objective of the study was to describe the influence of social media on respondents seeking dermatology related information and treatment.

Materials and methods

A validated self-administered structured questionnaire was posted on social media with a proposed sample size of 352. The data was collected and analyzed after reaching the sample size. This was a cross sectional questionnaire-based study.

Development of questionnaire

To prepare the questionnaire, multiple data sources were used to triangulate and gather comprehensive information. We searched using relevant hashtags, investigated the content created by bloggers, dermatologists, and other content creators to assimilate common topics and topics that were not being discussed. We also searched through the likes and comments of all the posts to gather topics of interest among viewers and their thoughts on it. We used this data to create a relevant questionnaire. The questionnaire was first circulated among certified dermatologists, and we gathered inputs from ten certified and experienced dermatologists. Their opinions were included after prompt discussion. The questionnaire was hence reviewed and revised to gain validation.

Design of questionnaire

We adopted a mixed methods approach for the design of the questionnaire to provide a more comprehensive understanding. The questionnaire contained 20 questions and was divided 5 parts. The questions were grouped into those pertaining to awareness of dermatology content on social media, type of information that they

derived from social media, implementation of the information that they derived, comparison of their attitude towards dermatologist and non-dermatologist influencers, and the influence of social media with regards to their self-esteem when it comes to skin and hair related issues.

The questionnaire took 3 to 4 minutes to be answered. Participants were assured that the responses would be anonymous. Appropriate information sheet and consent form were added before the start of the questionnaire. The participants could proceed to answer rest of the questions, once they consented to answering the questionnaire. The participants could choose not to answer any question they thought to be sensitive or for any other reason. No personal data were collected on the questionnaire.

Participant identification and dissemination of the questionnaire

The questionnaire was posted on social media. Once the respondents opened the link to the questionnaire, they would see the information sheet and consent form in the beginning of the questionnaire. An introductory question asked the respondents as to which social media platform they used, to derive skin or hair related information. This helped exclude respondents who did not derive skin/ hair related information from social media. A pilot test was done by sending it to 50 social media users, relevant corrections were done and then the questionnaire was posted on social media for 4 weeks in October 2022.

Statistical Analysis

The data was collected and stored anonymously. Analysis was performed using Microsoft excel software. For descriptive analysis, percentage, ratio, mean, standard deviation, median was calculated along with graphical and tabular presentations. For inferential statistics, bivariate analysis was done using $\chi2$ test, odds ratio, and a 95% confidence interval.

Results & discussion

This study was an endeavor to analyze the influence of social media content creators, that are becoming highly popular. We wanted to know how much of this information that is on the digital space is getting translated to real life. The results of the study were analyzed under the component headings of the questionnaire.

Sociodemographic data

A total of 352 responses were collected in this study, of which 275 (78.1%) were female and 67 (19.03%) were male. Overall, 93.2% of the participants were of the age range 20 to 30 years, 3.4% were of 31 to 40 years of age and 3.4% were above 30 years. 77.6% of respondents had completed at least one undergraduate degree, rest were students [Table 1]
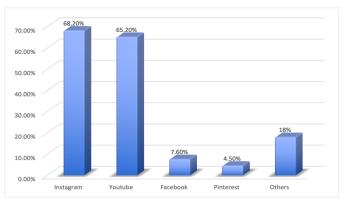
Table 1: Sociodemographic data

	Characteristic	Frequency	Percentage (%)
Age (years)			
	20 - 30	328	93.2
	31 – 40	12	3.4
	>40	12	3.4
Sex			
	Male	67	19.03
	Female	275	78.1
	Other	0	0
Occupation			
	Students	79	22.4
	Engineers	86	24.4
	Private company employees	72	20.4
	Doctors	28	8
	Designers	8	2.3

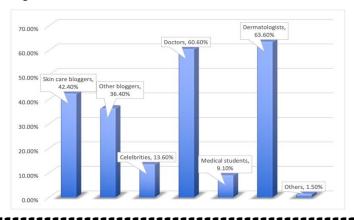|			
	Teachers	15	4.2
	Home makers	12	3.4
	HR personnel	8	2.3
	Business	22	6.2
	Chartered accountant	4	1.1
	Construction and real estate	12	3.4
	Architect	3	0.8
	Writers	2	0.5

Awareness of dermatology content on social media

Majority of respondents derived information regarding skin and hair from Instagram at 68.2%, followed by YouTube at 65.2%, Facebook standing at 7.6% [Fig1].
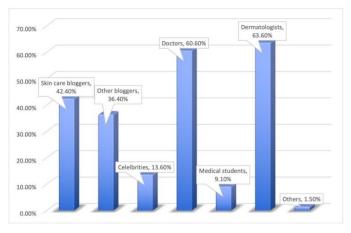
Fig 1:

Out of all, 63.6% of respondents viewed content from dermatologists, 60.6% also viewed content by other doctors, whereas 42.4% viewed content created by skin care bloggers [Fig2].

Fig 2:

However, 44% did not check a content creator's qualifications before reading / watching their content. The respondents were aware of the qualifications for a dermatologist, with 48% awareness for MD DVL and 28% for DNB DVL [Fig S1].
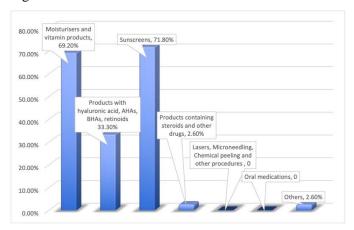
Type of information derived from social media

Out of all, 84.8% of respondents searched for general skin care information; 42.4% searched for common disorders such as acne, pigmentation, and dryness [Fig S2]. When asked which type of skin related information they were exposed to on social media without searching for specifics, 84.8% responded to general skin care, 37.9% responded to common disorders such as acne, pigmentation, and dryness [Fig S3]. We asked similar questions regarding the hair, to which 77.3% replied that they searched for content regarding general hair care, 21.2% searched for hair fall, 21.2% searched for grey hair and dandruff, and 6.10% searched for disorders such as alopecia areata, scarring alopecia and infections [Fig S4]. When asked what information regarding hair they got to view on social media without searching for specifics, 86.4% got to see general hair care information, 4.7% saw information on general hair fall, 13.6% saw information on grey hair and dandruff, and 1.5% saw information regarding disorders such as alopecia areata, scarring alopecia, infections [Fig S5].

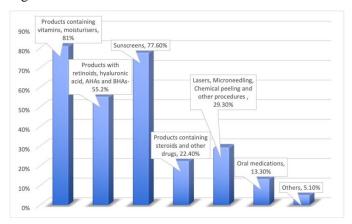**Implementation of social media derived information**

When asked if they do or would follow advice on skin care from a non-dermatologist influencer, 32% replied in affirmation while 68% replied no. Out of these, 71.8% chose to follow advice on sunscreens; 69.2% chose to follow advice on products containing vitamins & moisturizers; 33.3% chose to follow advice on products containing Retinoids, Hyaluronic acid, AHAs and BHAs; 2.6% said they would follow advice on products containing steroids and other drugs; while 2.6% said they would follow advice on home remedies and facewashes; and none of them chose to follow advice on oral drugs or procedures. [Fig 3].

Fig 3:

When asked if they would follow advice from a dermatologist on social media, 85% replied yes and 15% replied no. Out of these, 77.6% chose to follow advice on sunscreens; 81% chose to follow advice on products containing vitamins & moisturizers; 55.2% chose to follow advice on products containing Retinoids, Hyaluronic acid, AHAs and BHAs; 29.3% chose to follow advice on procedures such as lasers, micro needling; 22.4% chose to follow advice on products containing steroids and other drugs; and 13.3% agreed to follow advice on oral medications [Fig 4].

Fig 4:

The respondents were asked if they ever obtained a consultation from an influencer or a dermatologist on social media; to which 10% replied that they had consulted a dermatologist online for acne (2.8%), scars (3.6%), and dry skin (3.4%) and 80% replied no. The respondents were questioned whether their skin condition improved or deteriorated on following recommendations by a non-dermatologist influencer, to which 7.95% responded that their skin improved and none of them reported a deterioration. The products that they used were sunscreens, moisturizers, serums, and shampoos [Table 2].

Table 2: Has your skin health improved or deteriorated on using recommendations by a non-dermatologist influencer? If yes, elaborate. 7.95% reported improvement

Product that caused improvement	Percentage (%) of respondents
Serum	1.7
Moisturizer	2.2
Sunscreen	2.2
Skin care regime	1.1
Shampoo	0.5

We asked the respondents if they would buy skin /hair products that were advertised on social media without consulting a dermatologist, to which 30% replied yes,

and they chose to buy sunscreens, moisturizer, hair oil, shampoos, and serums [Table 3].

Table 3: Would you buy skin /hair products advertised on social media without consulting a dermatologist? If yes, which product? 30% Replied yes

Product they chose to buy	Percentage (%) of respondents
Sunscreen	29
Moisturizer	27.8
Hair oil	16.4
Shampoo	12.7
Serum	13
Face wash	10.7
Niacinamide	9

Attitude towards dermatologist and non-derma to logits influencers

The respondents were asked if they preferred obtaining skin related information from social media rather than from a consultation with a dermatologist, to which 73% replied yes and 27% replied no. This information was on general skin care (14.7%), general hair care (13.9%), serums (10.7%), open pores (7.9%), and dandruff (7.3%). Out of all, 10% of the respondents replied that they preferred to get this information from a dermatologist on social media. When asked if they would rather seek information from a non-dermatologist influencer who has more followers than from a dermatologist with lesser followers on social media, 64% replied no, 30% replied maybe and 6% replied yes.

Social media's effect on self-esteem

The respondents were asked if they faced any self-esteem issues due to skin/ hair related causes to which 78% replied yes. Out of these 34.2% faced it due to acne, followed by psoriasis and dry skin which each got 4.2% responses each, followed by 2.8% each for hair fall

and pigmentation [Fig S6]. When asked if social media helped them with any of these issues, 34% replied yes.

Discussion

Social media has become an increasingly popular source of skin related information, bearing heavy implications on the health of those getting influenced from it. This study was a novel effort to understand the practicality of this situation. According to our results, 63% respondents preferred to watch content created by dermatologists, and 60% via other doctors; compared to 42% via skin care bloggers. This shows that the respondents are aware of getting information from qualified personnel. However, 56% of respondents do not actively check the qualifications of content creators, even though more than 95% are aware of these qualifications.

This brings into question whether social media handles should promptly high light a content creator's qualifications for dermatology related content.

When asked what information they seek from social media regarding the skin, the content that they viewed matches their interests. However, when it came to the content on hair, 21% wanted to know more about hair fall, grey hair & dandruff but only 5% got to view content regarding hair fall, and only 14% saw content regarding grey hair & dandruff. 6% were aware of disorders such as alopecia areata, and only 1.5% got to see related content. This shows that there is a mismatch as to what the respondents were seeking from social media and what they were getting to see.

When we asked questions regarding practical implementation of the information on social media, the results showed that the respondents did implement the information, especially regarding routine products for the skin and various topical ingredients that contain pharmacological products.

When we asked if they would rather seek advice from a non-dermatologist influencer who has more followers on social media than from a dermatologist with lesser followers, 64% replied no but 30% replied maybe, and 6% replied yes. This shows that the number of followers is considered by some as a greater factor than qualification.

Overall, 78% respondents reported to facing dermatology related self-esteem issues, but only 34% reported that social media had helped them face these issues. This implies that more content needs to be created for promoting a positive body image.

Conclusion

The results of this study show a mismatch between what people are expecting to know from social media and what they are exposed to.

They are using recommendations by non-dermatologist influencers but would rather follow recommendations from dermatologists on social media. It would be appropriate to make it mandatory to display one's qualification for posting dermatology content.

Appendix

Supplementary figures have been included in the supplementary file.

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Supplementary Information

Figure S1: Are you familiar with these certifications for a dermatologist? If yes, then which? – Multiple choice question.

Figure S2: What information do you search for on social media regarding skin?

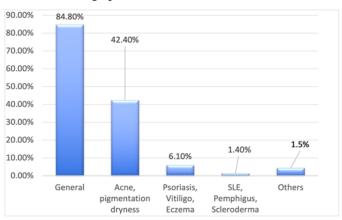Others: Nothing specific, Product science

Figure S3: What information regarding skin do you usually read /watch on social media without searching for specifics?
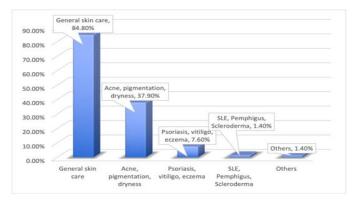
Others: Dark circles, dullness

Figure S4: What information regarding hair do you search for on social media?

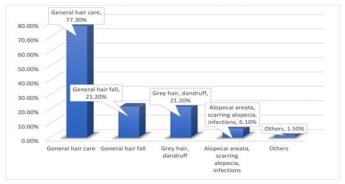Others: PCOS related hair fall, severe hair fall, effect of hair dyes.

Figure S5: What information regarding hair do you usually read/ watch on social media without searching for specifics?
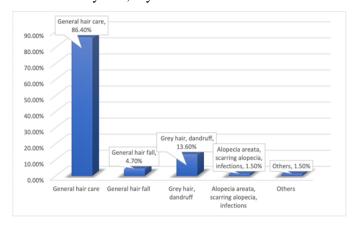
Others: Frizzy hair, dry hair

Figure S6: Do you face low self-esteem due to any skin related issues?