

# The impact of social media on women having dermatology procedures: A new insight in dermatology

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## Abstract

**Introduction** In Indonesia, the trend toward invasive and noninvasive dermatologic procedures continues to grow. This study investigates what makes Indonesian women immediately seek information about dermatology procedures and the possibility of making social media a media outlet in future implementations to provide accurate and precise information about dermatology procedures to women. This study aimed to determine the influence of social media on women undergoing dermatological treatments.

**Methods** Qualified participants were asked to complete an online questionnaire in October 2022, using Google forms.

**Results** A total of 91 female respondents aged 15 to 50 completed the survey. Approximately 82.5% agreed that social media can be a motivator for beautifying themselves, and 51.8% agreed that social media can encourage society to perform dermatology procedures. Acne rather than extra fat tissue bothers 34.1% of respondents. A total of 43.3% of respondents also agree that influencers on social media create beauty trends that motivate them to beautify themselves. A total of 53.6% of respondents agreed that dermatologists' social media was the most influential factor affecting their motivation to perform dermatology procedures.

**Conclusion** Dermatologists are currently facing a digital age of beauty. It is a further challenge for dermatologists to accurately provide information about dermatology procedures and fulfill the dynamic demands of patients by having a better awareness of market trends.

## Key words

Social media; Women; Dermatology procedures.

## Introduction

Everyone has a desire to look attractive. Choosing to alter one's appearance implies acknowledging a personal flaw, and this repetitive conduct may prompt an individual to

seek dermatological therapy for a variety of skin conditions.<sup>1</sup> In Indonesia, the trend toward invasive and noninvasive dermatologic procedures continues to grow.<sup>2,3</sup> Historically, the desire to pursue dermatological procedures has been associated with psychopathology. A positive change in a person's appearance can improve their psychological health, including their self-confidence. Recently, it has been discovered that the motivations for performing dermatological procedures are more complicated.<sup>4</sup>

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In 2017, according to a poll by the American Society of Dermatologic Surgeons or ASDS, the proportion of respondents considering dermatological operations quadrupled (from 30 percent to 70 percent). Social media is one of many factors influencing the growing public interest in dermatology procedures. A 2021 study by ASDS found that social media was the third factor influencing whether someone would undergo a dermatology procedure.<sup>5</sup> In addition, 52 percent of respondents indicated that a provider's social media presence influenced their decision to consult for dermatological treatments, an increase of 9 percent from the 2019 study. The growing trend of social media-inspired dermatological procedures underscores the need to better comprehend patients' reasons for seeking procedures.

Utilization of social media has increased significantly during the past three decades. Over fifty percent of the global population utilizes social media.<sup>1,6</sup> In Southeast Asia, Indonesia is among the countries with the most active social media users. Since 2014, the number of Indonesians actively using social media has grown, reaching 68.9% of Indonesia's population in 2022.<sup>7</sup> In particular, Indonesians have a strong presence on Instagram and Facebook, with 85.5% of the country's social media users using these two apps regularly.

As social media reach expands, the number of people exposed to information about dermatology procedures will continue to grow. However, the impact of social media on individuals' desire to undergo dermatology procedures in Indonesia has been largely unstudied. Therefore, this study aimed to examine the influence of social media on people's desire to undergo dermatology procedures. Hopefully, this research will identify predispositions influencing women to seek dermatological procedures through social media, especially in Indonesia. It can be developed as a

representative medium to distribute fast, precise, and accurate information.

## **Methods**

The research method used in this study was a semi descriptive quantitative method (used to describe something and assess the effect of conditions that appear by using numbers).<sup>8</sup> The population of this study is made up of all social media users in Indonesia. The reachable population is all social media users who have been active in the last two months. Study samples are affordable populations meeting inclusion and exclusion criteria.

Active social media users, who had been active, for at least 2 months before the survey was given were included. Simple random sampling methods were used to select research subjects. Below is the Slovin formula used to count minimal subjects in this research for  $N=1000$  if the known population measure ( $N$ ) has a significant value  $\alpha$  (0,1).<sup>9</sup> According to the formula, the minimum number of participants required for this study is 91.

$$n = \frac{1000}{1 + 1000 (0.1)^2} = 91$$

Whereas:  $n$ : Number of samples;  $N$ : Number of populations;  $\alpha$ : Tolerance of mistakes in choosing samples up to 10%.

We collected data using an online questionnaire containing multiple research-related inquiries. Through social media platforms such as WhatsApp, TikTok, Instagram, and Facebook, 91 respondents were given the same form to complete based on their conditions and interests concerning the research issue. Each respondent had to fill out the form's required fields without any assistance.

After participants signed an online consent form, survey results were collected using Google forms. The information was then tallied in a

spreadsheet format using a Google form and processed using Microsoft Excel. All data was descriptively examined and presented as graphs and narratives.

This research (No. 400/245/K.3/102.7/2022) was approved by the Health Research Ethics Committee of Doctor Saiful Anwar Malang Regional General Hospital.

## Results

All 91 respondents agreed to participate and completed the survey in October 2022. All the respondents were female. Most respondents were aged 21–30 years (58.4%). YouTube (9.1%), TikTok (5.1%), and Instagram (77.1%) were the three most popular social media platforms for finding health information. A total of 82.9% of respondents felt that social media motivated them to beautify themselves (**Figure 1**). The most influential social media platform was Instagram (49.7%), followed by YouTube (27.4%) and TikTok (21.1%). Of the respondents, 42.3% felt influencers were the most motivating social media accounts for beautifying themselves, and 40.6% felt dermatologists' social media was the most motivating for them (**Figure 1**).

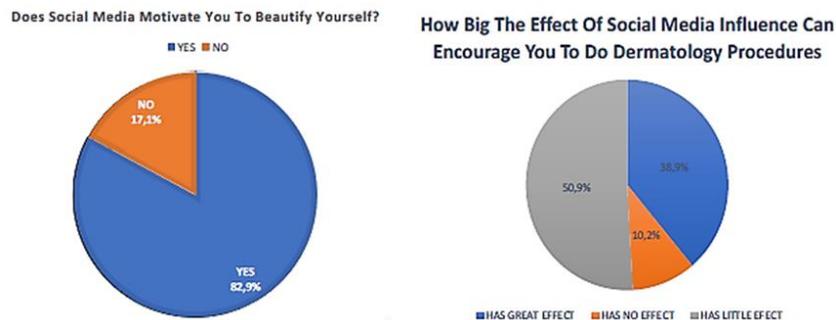
Fifty percent of respondents think that social media has minimal impact on their decision to have dermatological treatments (**Figure 1**), with doctors' social media accounts ranking as the most influential of all accounts that affect

respondents' decisions to undergo dermatology operations. The biggest motives were the desire to accomplish something for oneself (37.7%), feeling more confident (28.6%), and looking more handsome (18.9%) (**Figure 2**). Acne troubled them the most (34.3%), followed by dull skin (14.9%) and skin texture and discolorations (12.6%) (**Figure 2**). The top three therapies being considered by respondents are acne scar therapy (53.1%), melasma or hyperpigmentation laser (12%), and rejuvenation laser (8.6%).

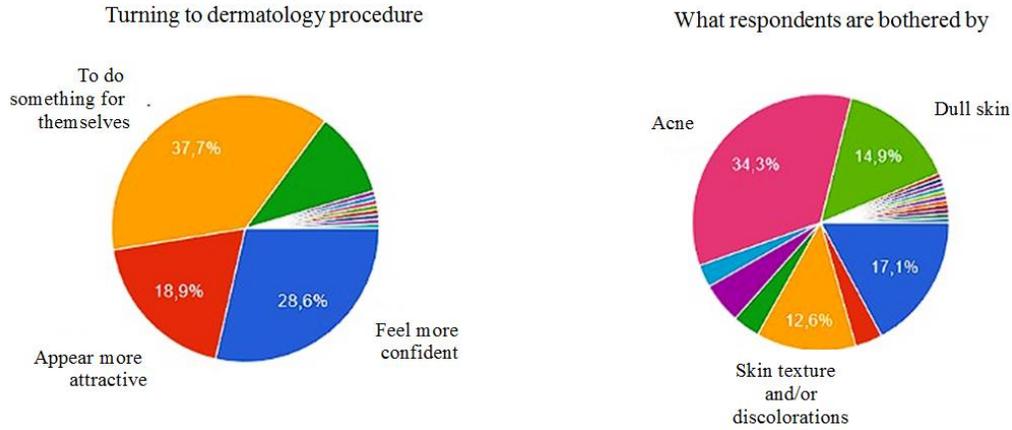
## Discussion

Social media usage is at an all-time high, especially among the younger generation.<sup>1</sup> A total of 58.4 percent of our respondents were between the ages of 21-30, which is consistent with a prior study's results that young people are more inclined to use social media.<sup>1</sup> In the research conducted by Chen *et al*; females outnumbered males.<sup>10</sup> YouTube and TikTok were the second most popular social media networks.<sup>2,6</sup> These have altered how individuals view and show themselves. This may have important dermatological repercussions.<sup>1</sup>

The majority of respondents (97%) in Agrawal's study published their images on social media. Instagram (53.3%) and Facebook (33.7%) were the most popular social media sites for photo sharing.<sup>1</sup> Instagram is a free social networking service that enables users to edit and share images and videos.



**Figure 1** Survey of media social influence on dermatology procedures.



**Figure 2** Survey of society's perception of dermatology issues.

Instagram's visual and image-centric nature allows users to view and comment on images other users display on their CHEN profiles. The world population's interest in maintaining youthfulness and having a better appearance has increased, as have the dynamics of beauty trends that keep changing yearly.

Social media creates space for the creativity and art of society; an example is influencers' appearance.<sup>11-13</sup> Influencers can constantly change beauty trends in society through their posts or content and influence people to follow them or make them role models. Not only lifestyle but also physical appearance motivates society. This condition can affect how people perceive their appearance and sometimes make them want to do something about it.<sup>10</sup> For example, people change their appearance by having dermatological procedures. In our study, 82.9% of respondents felt social media motivated them to beautify themselves, with influencers' and dermatologists' social media motivating them the most. Over a quarter of respondents in the study by Barasain *et al.* consistently compare their appearance to celebrities on social media.

Half of our respondents agree that social media has little effect on their decision to undergo dermatology procedures.<sup>14</sup> Social media

marketing for dermatological treatments may have impacted the choice to have the operation, according to the principal results. ASDS (American Society for Dermatologic Surgery) rated social media third among the elements affecting dermatological treatment in a survey.<sup>5,15</sup>

The social media accounts of dermatologists are the most influential accounts on respondents' decisions to have a dermatological procedure. This contradicts the conclusions of Agrawal's study;<sup>1</sup> 37.4% of participants chose dermatologists for their dermatological procedure, while the majority preferred to consult nondermatologists. For example, if you do a Google search for dermatology procedures, most results relate to the information provided by nondermatologists, with few answers from research papers or clinical trials. This is a new challenge for dermatologists to move forward with and adapt this situation. We must learn more about using social media to ensure that society does not receive invalid information and receives treatment properly and as indicated.

The desire to do something for themselves (37.7%), feeling more confident (28.6%), and appearing more attractive (18.9%) were the leading motivations. This is consistent with the study conducted by Agrawal.<sup>1</sup> More than fifty

percent of respondents in this survey stated that their objectives for undergoing dermatological operations were to improve their looks, increase their attractiveness, repair damaged skin, make them appear younger without cosmetics, and boost their quality of life. Three-quarters of respondents said that the processes made them better in general.

The respondents to this study were most bothered by acne, dull skin, skin texture, and discolorations. The results contrasted with those of a poll performed by the American Society for Dermatologic Surgery (ASDS), which revealed that excess fat on any part of the body and excess fat beneath the chin or neck were the most distressing portions of the respondent's body. However, half of the respondents were disturbed by skin texture and discoloration.<sup>5,15</sup> The top treatment respondents considered in Indonesia based on our research was acne scar treatment; this is in line with the result that the most common issue for Indonesian women is acne.

While social media may be an effective educational resource for women seeking information about dermatological treatments, it also poses a number of issues for medical practitioners,<sup>16-18</sup> including;

1- social media platforms allowing everyone to share information, which may be both a strength and a drawback in terms of accuracy and quality control.<sup>2,19</sup> Dermatologists must ensure that the information they communicate is accurate, supported by evidence, and current. In addition, they must ensure that the content they publish adheres to ethical and professional norms.

2- Misinformation: social media may be a source of false information, leading to confusion and misunderstanding.

3- Patient privacy: while social media is a public

platform, publishing patient information online can endanger patient privacy and confidentiality. Dermatologists must comply with all applicable privacy rules and regulations when sharing information on social media.<sup>20-22</sup>

4- Improper or offensive remarks; social media may be fertile ground for inappropriate or offensive comments. Dermatologists must be prepared to respond to any unfavorable or unprofessional comments on their social media accounts.

5- Restricted access: not all patients have access to social media, and some may not utilize it to acquire healthcare information. Dermatologists must employ a range of communication channels to reach all patients, irrespective of their social media usage.

## **Conclusion**

Since social media is now has a huge impact on society, including creating social trends, especially in beauty and lifestyle. Currently, society also has influencers on social media as role models. From the survey, 43.4% of respondents agreed that influencers on social media motivate them to beautify themselves, and 53.6% agreed that dermatologists' social media accounts are good sources to seek information about dermatology procedures. The challenge for dermatologists is to always provide information about dermatology procedures and increase awareness of the demands of society that keep changing market trends. Indonesian women are more concerned with acne than excess fat problem which is different from American society. In the future, further research is needed, related to supporting factors that increase women's desire to follow and apply dermatological procedures at all ages.

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