

SOCIAL MEDIA EXPOSURE AND SELF-TREATMENT BEHAVIOUR IN ACNE VULGARIS IN PRODUCTIVE AGE GROUP: A CROSS-SECTIONAL STUDY

Farida Ulfa^{1*}, Harastha Qinthara Mathilda², Novia Sari Andriati Mertosono³, Reinardus Davin⁴
^{1,2,3,4} General Practitioner, Faculty of Medicine, Pembangunan Nasional 'Veteran' University, Jakarta

Corresponding author

Farida Ulfa

General Practitioner, Faculty of Medicine, Pembangunan Nasional 'Veteran' University, Jakarta

E-mail: ulfaallauw@gmail.com,

ABSTRACT

Background: Acne vulgaris is one of the most prevalent dermatological conditions among individuals of productive age. The rapid growth of social media has significantly influenced how patients access health information, particularly regarding acne management. However, the quality and reliability of such information remain questionable, potentially leading to inappropriate self-treatment behaviors.

Objective: To evaluate the association between social media exposure and self-treatment behaviour among individuals of productive age with acne vulgaris.

Methods: This cross-sectional analytical study was conducted using an online questionnaire. Social media exposure was assessed through engagement with dermatology-related content, while self-treatment behaviour included the use of over-the-counter products, home remedies, and treatments without medical consultation. Data were analysed using Spearman correlation and descriptive statistics.

Results: A total of 33 respondents were included in this study. Approximately 27.3% of respondents stated that social media was their primary source of information regarding acne, while 42.4% were neutral toward this statement. Around 42.4% of respondents reported practising self-treatment for acne without consulting a doctor, including the use of non-prescribed medications and skincare products influenced by online content. Reliability analysis demonstrated good internal consistency, with Cronbach's alpha values of 0.811 for social media exposure and 0.782 for self-treatment behaviour. Spearman correlation analysis showed a significant positive association between social media exposure and self-treatment behaviour ($r = 0.432$; $p = 0.012$).

Conclusion: Higher social media exposure is associated with increased self-treatment behaviour among individuals with acne vulgaris. Social media may influence patients to use acne treatments without medical consultation and rely on non-medical sources of information.

Keywords: acne vulgaris, social media, self-treatment, dermatology, health behaviour

INTRODUCTION

Acne vulgaris is one of the most common dermatological conditions affecting adolescents and young adults worldwide.¹ The condition may cause physical manifestations such as papules, pustules, nodules, and scarring, as well as psychosocial consequences including low self-esteem and impaired quality of life.¹ The prevalence of acne vulgaris remains high among individuals of productive age, making it an important public health concern.¹

The rapid development of digital technology and internet accessibility has transformed the way individuals seek medical information.^{2,15} Social media platforms such as Instagram, TikTok, and YouTube are increasingly used as major sources of information regarding skincare and acne

management.^{2,3,11} Several studies have reported that a substantial proportion of acne patients rely on social media for treatment recommendations and skincare advice.^{3,4}

Although social media provides easy access to health information, the reliability and scientific validity of online content remain questionable.^{5,16} Many skincare recommendations shared by influencers or non-medical users are not evidence-based and may encourage inappropriate treatment practices.^{5,6,13} As a result, patients are more likely to perform self-treatment without proper medical consultation.⁷

Self-treatment behaviors among acne patients includes the use of over-the-counter medications, herbal remedies, skincare products, and discontinuation of prescribed treatment without physician supervision.^{7,19} Previous studies

have demonstrated that social media exposure may influence patients' decisions regarding acne therapy and increase trust in non-medical sources.^{2,8,14}

Therefore, continuous exposure to skincare trends, influencer recommendations, and algorithm driven content may reinforce these behaviours by shaping perceptions acne treatment and encouraging unsupervised treatment practices. Despite the growing influence of social media on dermatological behaviour, limited studies in Indonesia have specifically evaluated how social media exposure influences self-treatment behaviour among individuals with acne vulgaris.^{9,10} Therefore, this study aimed to evaluate the association between social media exposure and self-treatment behaviour among individuals of productive age with acne vulgaris, including the tendency to use acne treatments without professional medical consultation.

METHODS

Study Design

This study used an analytical observational design with a cross-sectional approach.

Study Population and Sampling

The study population consisted of individuals of productive age who experienced acne vulgaris and actively used social media. Respondents were recruited using convenience sampling through online distribution of questionnaires.

Inclusion Criteria

Individuals aged 15–40 years. Respondents with acne vulgaris. Willing to participate in the study.

Exclusion Criteria

.Incomplete questionnaire responses. Duplicate responses.

Data Collection

Data were collected using a structured online questionnaire distributed through social media platforms. The questionnaire consisted of demographic characteristics, social media exposure variables, and self-treatment behaviour variables.

Research Instrument

The questionnaire used a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Social media exposure was measured using five items related to acne-related content exposure, while self-treatment behaviour was assessed using six items related to independent acne management.

Validity and Reliability Test

Validity was assessed using corrected item-total correlation with a cut-off value of $r \geq 0.30$. Reliability testing was performed using Cronbach's alpha. A Cronbach's alpha value ≥ 0.70 was considered acceptable.

Statistical Analysis

Data analysis was performed using Statistical Package for Social Sciences (SPSS). Descriptive statistics were used to present respondent characteristics.

The association between social media exposure and self-treatment behaviour was analysed using Spearman correlation. Statistical significance was defined as $p < 0.05$.

Ethical Consideration

All respondents provided informed consent before completing the questionnaire. Respondent anonymity and confidentiality were maintained throughout the study.

RESULTS

Respondent Characteristics

A total of 33 respondents participated in this study. Most respondents were female and belonged to the productive-age group.

The majority of respondents were female (72.7%), while male respondents accounted for 27.3% of the total sample. Regarding acne severity, mild acne was the most commonly reported severity level (45.5%), followed by moderate acne (39.4%) and severe acne (15.1%).

Table 1. Respondent Characteristics

Variable	n	%
Gender		
Female	24	72.7
Male	9	27.3
Acne Severity		
Mild	15	45.5
Moderate	13	39.4
Severe	5	15.1

Social Media Exposure

Among all respondents, 27.3% agreed that social media was their primary source of information regarding acne, while 42.4% responded neutrally.

The findings indicate that social media played a considerable role in acne-related information seeking among respondents.

Although only 27.3% of respondents considered social media as their primary source of information, a large proportion of respondents reported neutral perceptions, suggesting variable dependence on digital platforms for acne management information *Self-*

Table 2. Social Media as Primary Source of Acne Information

Response Category	n	%
Agree/Strongly Agree	9	27.3
Neutral	14	42.4
Disagree/Strongly Disagree	10	30.3

Treatment Behaviour

Approximately 42.4% of respondents reported performing self-treatment for acne without consulting a physician. Self-treatment behaviour was relatively common among respondents. Nearly half of the participants reported

managing acne without professional medical consultation, reflecting a tendency among individuals to independently use skincare products and acne therapies influenced by online content and social media recommendations.

Table 3. Self-Treatment Behaviour Without Medical Consultation

Response Category	n	%
Agree/Strongly Agree	14	42.4
Neutral	9	27.3
Disagree/Strongly Disagree	10	30.3

Table 4. Correlation Between Social Media Exposure and Self-Treatment Behaviour

Variables	r	p-value
Social media exposure vs self-treatment behaviour	0.432	0.012

Validity and Reliability Analysis

All questionnaire items demonstrated acceptable validity with corrected item-total correlation values above 0.30. Reliability analysis demonstrated good internal consistency, with Cronbach's alpha values of 0.811 for social media exposure variables and 0.782 for self-treatment behaviour variables.

The obtained Cronbach's alpha values demonstrated acceptable internal consistency for both variables, indicating that the questionnaire items were considered reliable for assessing social media exposure and self-treatment behaviour in this study population.

DISCUSSION

This study demonstrates a significant positive association between social media exposure and self-treatment behaviors among individuals with acne vulgaris.^{2,3} Respondents with higher exposure to acne-related social media content are more likely to engage in self-treatment practices without professional medical consultation.^{7,8,17} The findings are consistent with previous studies reporting that social media has become a major source of dermatological information among acne patients.^{3,4} Several studies have shown that social media platforms significantly influence treatment decisions and encourage the use of non-prescribed skincare products and medications.^{2,8}

Correlation Analysis

Spearman correlation analysis revealed a statistically significant positive correlation between social media exposure and self-treatment behaviour ($r = 0.432$; $p = 0.012$). The correlation coefficient indicated a moderate positive relationship between social media exposure and self-treatment behaviour. This finding suggested that respondents with greater exposure to acne-related social media content were more likely to engage in independent acne treatment practices. All questionnaire items met the validity criteria, with corrected item-total correlation values above 0.30.

In the present study, approximately 27.3% of respondents consider social media as their primary source of acne-related information. This finding supports previous literature indicating that social media plays an important role in shaping patient behaviors and perceptions toward acne management.^{3,4} Furthermore, 42.4% of respondents report performing self-treatment without consulting healthcare professionals. These behaviors may be influenced by easy access to skincare information, online product promotion, and recommendations from influencers.^{5,6,12} While self-treatment may offer convenience, inappropriate acne management may increase the risk of adverse effects, delayed treatment, and worsening skin conditions.⁷ The reliability analysis demonstrates good

internal consistency for both research variables, indicating that the questionnaire used in this study was reliable for measuring social media exposure and self-treatment behaviors. The significant positive correlation found in this study suggests that increasing exposure to social media content may influence patients' treatment decisions and reliance on non-medical advice.^{2,5} These findings emphasize the growing impact of digital platforms on dermatological behaviors.^{9,20}

However, this study has several limitations. The relatively small sample size and use of convenience sampling may limit the generalizability of the findings. In addition, the cross-

sectional design cannot establish causal relationships between variables.

Future studies with larger populations and longitudinal designs are recommended to further explore the influence of social media on dermatological health behaviors.¹⁰

CONCLUSION

Higher social media exposure is associated with increased self-treatment behaviors among individuals with acne vulgaris. Social media may influence patients to use acne treatments without medical consultation and rely on non-medical sources of information.

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