

Social Media Usage Habits and Treatment-Seeking of Patients with Seborrheic Dermatitis: A Cross-Sectional Study

Seboreik Dermatitli Hastaların Sosyal Medya Kullanım Alışkanlıkları ve Tedavi Arayışları: Kesitsel Bir Çalışma

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ABSTRACT Objective: We wanted to examine how often patients with seborrheic dermatitis use social media to investigate their own diseases and seek treatment options. We believe that such incurable skin diseases are often abused on social media and the internet. **Material and Methods:** The 2-page questionnaire was delivered to participants who were being asked to fill out a 16-question questionnaire. The demographic information of the patients, the difficulties associated with the treatment of their disease, who they trust the most, their use of social media, which social media resources they use, and the changes in the severity of their illness after social media use were questioned. **Results:** The most frequently used social media platform was Instagram (63.6%) and YouTube (53%). After the social media recommendations, 35.2% of the patients stated that the severity of the disease did not change. 43.9% of the patients were compatible with the treatment guideline, and 19.7% were not. 15.2% of the patients complied with the guideline but also applied non-recommended lifestyle changes. **Conclusion:** This study showed that the majority of patients with seborrheic dermatitis are unsatisfied with the treatment of their disease and use social media very often to investigate the treatment of their diseases. Therefore, the data to be obtained in this regard can enable professionals to use social media more effectively so as to direct patients correctly and help protect patients from inappropriate treatments and high treatment costs.

Keywords: Seborrheic dermatitis; social media; treatment guidelines

ÖZET Amaç: Seboreik dermatitli hastaların kendi hastalıklarını araştırmak ve tedavi seçenekleri aramak için sosyal medyayı ne sıklıkla kullandıklarını incelemek istedik. Bu tür küratif tedavisi olmayan cilt hastalıklarının sosyal medyada ve internette sıklıkla suistimal edildiğine inanıyoruz. **Gereç ve Yöntemler:** On altı soruluk bir anketi doldurmaları istenen katılımcılara 2 sayfalık anket verildi. Hastaların demografik bilgileri, hastalıklarının tedavisi ile ilgili güçlükleri, en çok kime güvendikleri, sosyal medya kullanımları, hangi sosyal medya kaynaklarını kullandıkları ve sosyal medya kullanımı sonrası hastalık şiddetindeki değişimler soruldu. **Bulgular:** En sık kullanılan sosyal medya platformu Instagram (%63,6) ve YouTube (%53) idi. Sosyal medya tavsiyelerinin ardından hastaların %35,2'si hastalığın şiddetinin değişmediğini ifade etti. Hastaların %43,9'u tedavi kılavuzuna uyumlu, %19,7'si uyumlu değildi. Hastaların %15,2'si kılavuza uydu ancak tavsiye edilmeyen yaşam tarzı değişikliklerini de uygulamıştı. **Sonuç:** Bu çalışma, seboreik dermatitli hastaların büyük çoğunluğunun hastalıklarının tedavisinden memnun olmadığını ve hastalıklarının tedavisini araştırmak için sosyal medyayı çok sık kullandıklarını göstermiştir. Dolayısıyla bu konuda elde edilecek veriler, profesyonellerin hastaları doğru yönlendirmek için sosyal medyayı daha etkin kullanmasını sağlayabilir ve hastaların uygunsuz tedavilerden ve yüksek tedavi maliyetlerinden korunmasına yardımcı olabilir.

Anahtar Kelimeler: Seboreik dermatit; sosyal medya; tedavi kılavuzları

The internet has become an important research platform for those who want to inform themselves before consulting a physician and for patients seeking more information, such as treatment options.¹ Social media covering multiple internet-based platforms for online communication reaching a large part of the global population is often used by patients to seek advice on skin issues or find a dermatologist.² The

prevalence of seborrheic dermatitis (SD) in the general population is 1% to 3%. It reaches very high rates in immunocompromised individuals, such as 34% to 83%.³ Since SD reduces the quality of life and causes serious emotional problems, it is crucial to treat it appropriately.⁴ The treatment of SD is affected by racial differences that affect the skin structure, socioeconomic and cultural factors. For example, the low

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number of dermatologists in the country, the scarcity of treatments, limited insurance support, and the abundance of over-the-counter (OTC) and non-evidence-based products are among these factors. Therefore, the patient may choose to self-medicate via social media sources or have treatment from pharmacists, beauticians, and non-physicians. In addition, social media can affect people's perceptions of their illness and serve their treatment seekings. Social media posts from inappropriate sources can cause patients to purchase improper drugs without a physician's supervision and increase treatment costs.^{5,6} SD treatment is usually covered by health insurance, but some medications are excluded. Treatment costs are less than \$20 per month for mild cases and can range from \$50-\$400 for moderate to severe cases.^{3,7} We think that social media is frequently used in chronic skin diseases such as SD and that it affects the treatment of patients. The data to be obtained on this subject may enable the professionals to use social media more effectively in terms of guiding the patients correctly and may be helpful to protect the patients from some dangers.

MATERIAL AND METHODS

SURVEY METHODS AND CONTENT

This study was performed in accordance with the ethical principles of the Declaration of Helsinki. The Clinical Research Ethics Committee of Maltepe University approved this study and informed consent was obtained from all patients (date: May 4, 2021, no: 2021/900/68). Our participant group consisted of people who had previously been diagnosed with SD and knew the diagnosis of their disease. Patients with a diagnosis of SD were asked to fill out a 16-item questionnaire. Four questions were about the demographic characteristics of the patients, 6 questions about the characteristics of SD, 6 questions about their use of social media and the effects of social media on the treatment of SD. Exclusion criteria of the study were being under the age of 18 and over the age of 50, being pregnant, breastfeeding, being diagnosed with SD for the first time, and not volunteering for the survey. The questionnaire did not contain identifiable patient information.

DATA ENTRY

The questions asked the patients included the following: The demographic information of the patients, the difficulties associated with the treatment of their disease, who they trust the most, their use of social media, which social media resources they use, and the changes in the severity of their illness after social media use. The recorded data was exported to an Excel file. Participants were asked, "Have you tried any treatment for your disease based on social media recommendations?" According to the answers given to the question, social media users and non-users were divided into two groups. It was evaluated whether the treatments received by the patients based on their social media recommendations were compatible with the SD treatment guideline of the Asian group.⁶ The treatments received by the patients with the advice of social media were classified as 3 groups; compatible with the guideline, compatible with the guideline together with including lifestyle and diet changes, and incompatible with the guideline. The Seborrheic Dermatitis Area and Severity Index scale developed by Micali et al. were used to assess the severity of SD.⁸

STATISTICAL ANALYSIS

Descriptive statistics for the continuous variables studied were recorded as frequencies, mean values, standard deviation, and minimum and maximum values. Statistical analysis of the data was done in IBM SPSS statistical version 26 program (IBM, USA). Pearson chi-square and Fisher's exact test statistical analyzes were used to compare categorical data between groups. $p < 0.05$ was considered statistically significant.

RESULTS

Of the 132 participants, 78.8% were female, and 21.2% were male. The mean age was 26.045 (± 7.436) years, and the mean disease duration was 2.54 (± 0.92) years. The severity of SD was mild in 28%, moderate in 48.3%, severe in 19.7%, and very severe in 3.8% of patients. 78.8% of patients used social media to seek treatment for their disease, and 21.2% did not. To the question "Do you think it is right to use social media to get information about your illness

and seek treatment?"; 59.1% of patients answered, "yes, but my physicians' recommendations are more important to me", 15.9% said that they take social media suggestions as seriously as their physicians, 12.9% said that they were not against it but had not received any recommendations, 5.3% said that they found it more important than the recommendation of their physicians and 3.8% said that they were strongly against it. Women and the 18-30 age group were more likely to receive social media suggestions ($p < 0.001$, $p = 0.020$, respectively). There was no difference in disease severity between those who received social media advice and those who did not ($p = 0.234$) (Table 1).

54.8% of the patients stated that they used OTC products in line with the social media recommendation they received, and 35.6% applied to diet and lifestyle changes. In addition, 7.7% used supplements, and 1.9% used self-made products (Table 2).

The most frequently used social media platform was Instagram (©Meta, USA) (63.6%). Then YouTube (©Google LLC, USA), google search, and websites were used (53%, 50.8%, 42.4%, respectively). Other platforms were much less used. After the social media recommendations, 35.2% of the patients stated that the severity of the disease did not change. The rest stated that they had a mild, moderate, or significant benefit (26.4%, 21.6%, 16.8%, respectively). 43.9% of the patients were compatible with the treatment guideline, and 19.7% were not. 15.2% complied with the guideline but included lifestyle modifications (Table 2).

"Whose advice do you trust most about your illness?" question was answered respectively as dermatologists, people with this disease, family physicians, social media, pharmacists, and scientific articles (81.1%, 12.9%, 2.3%, 2.3%, 0.8%, 0.8%, respectively) (Table 2).

TABLE 1: Demographic data and characteristics of all participants.

	Total (n=132) n (%)	Social media consultation (n=104) n (%)	No social media consultation (n=28) n (%)	p value
Sex				<0.001
Female	104 (78.8)	89 (85.6)	15 (53.6)	
Male	28 (21.2)	15 (14.4)	13 (46.4)	
Age				0.020
18-30 years	98 (74.2)	82 (78.8)	16 (57.1)	
30-50 years	34 (25.8)	22 (21.2)	12 (42.9)	
Seborrheic dermatitis severity				0.234
Mild	37 (28.0)	32 (30.8)	5 (17.9)	
Moderate	64 (48.5)	49 (47.1)	15 (53.5)	
Severe	26 (19.7)	18 (17.3)	8 (28.6)	
Very severe	5 (3.8)	5 (4.8)	0 (0.0)	
Do you find the use of social media correct?				
I'm not against it, but my physicians' recommendations are more important to me	78 (59.1)	57 (54.8)	21 (75)	
I find social media suggestions as important as my physicians' suggestions.	21 (15.9)	21 (20.2)	0 (0.0)	
I'm not against it	17 (12.9)	15 (14.4)	2 (7.1)	
I find it absolutely true	7 (5.3)	7 (6.7)	0 (0.0)	
No, I don't	5 (3.8)	0 (0.0)	5 (17.9)	
Other	4 (3.0)	4 (3.8)	0 (0.0)	
	n	Mean (SD)	Median (minimum/maximum)	
Age (year)	132	26.3636 (±6.966)	24.5 (18/44)	
Disease duration (year)	132	2.54 (±0.92)	2 (1/4)	

SD: Standard deviation.

TABLE 2: Survey results on social media use of patients with seborrheic dermatitis and its effect on disease treatment.

	n	%
Treatment recommendation		
Over-the-counter product	57	54.8
Diet and lifestyle modification	37	35.6
Supplement use	8	7.7
Self-made product	2	1.9
Social media platform		
Instagram (© Meta, USA)	84	63.6
YouTube (© Google LLC, USA)	70	53
Google (© NASDAQ: GOOG, USA) search	67	50.8
Web site	56	42.4
Facebook (© Meta, USA)	8	6.1
Pinterest (USA)	7	5.3
Twitter (USA)	5	3.8
TikTok (Douyin, China)	3	2.3
Telegram (Russia)	2	1.5
Whatsup (© Meta, USA)	2	1.5
Seborrheic dermatitis change		
No change	44	35.2
Minimal improvement	33	26.4
Mild improvement	27	21.6
Significant improvement	21	16.8
Seborrheic dermatitis guidelines		
Compatible	58	43.9
Compatible and lifestyle changes	20	15.2
Not compatible	26	19.7
Whose advice do you trust most?		
Dermatologist	107	81.1
Those suffering from this disease	17	12.9
Family physician	3	2.3
Social media	3	2.3
Pharmacist	1	0.8
Articles	1	0.8
Situations that force you about your illness		
There is no satisfactory treatment	109	82.6
Frequent recurrence	87	65.9
Itching and causing dandruff	76	57.6
Self-confidence problem	58	43.9
Not enough treatment products	51	38.6
Medication and examination fees are expensive	1	0.8

Participants answered the “What are the most challenging situations regarding your illness?” question as follows: no satisfactory treatment (82.6%),

frequently recurring (65.9%), causing itching and dandruff (57.6%), causing self-confidence problems (43.9%), not enough treatment agents (38.6%), drugs and dermatology examination fees are expensive (0.8%) (Table 2).

DISCUSSION

We investigated how social media affects SD treatment and found that most patients use social media to learn about their disease and seek treatment. It was prevalent among women and 18-30-year-olds. This may be due to the fact that women care more about their illnesses than men. In addition, it may be due to the fact that young people find the use of social media more attractive, they have a better command of electronic technologies than older people, and they want to reach information quickly.

Searching for medical information online is essential for dermatology patients, but dermatologists may underestimate it.⁹ The majority of our patients were also inclined to receive social media suggestions.

There was no difference between the conditions of our patients receiving social media advice in severe or mild diseases. This may be because SD is a disease that can decrease intermittently and is characterized by periods of exacerbation and remission.¹⁰

In our patients, the trend towards OTC products increased (54.8%). Patients may have turned to OTC products because the disease occurs in visible areas, causes itching and dandruff that decreases self-esteem, and in addition, it is difficult to reach the physician. It is estimated that at least 50 million Americans with SD have OTC product costs totaling \$300 million per year.¹¹ A small number of patients were not receiving proper treatment (19.7%). This may have a role to play in the frequent use of OTC products by patients and their preference for dandruff-effective shampoos that are suitable for the treatment manual within this product group.

Two studies examined the relationship of SD with diet, smoking, alcohol use, and stress in the literature. SD was not associated with diet, smoking, alcohol use, and stress. Although it is suggested that a western-type diet increases the likelihood of SD,

especially in women, there is not enough work between diet and SD.^{12,13} 35.6% of our patients had implemented diet and lifestyle changes following social media recommendations. Patients report benefiting from life changes. Further studies on this topic can help us obtain helpful information to control SD. Dermatologists have a significant role in informing patients correctly, both in the clinic and in social media.

Instagram and YouTube are the most commonly used platforms for widespread diseases of dermatology.¹⁴ We also found more use of Instagram and YouTube (63.6%, 53%, respectively). Therefore, the use of social media by physicians, associations, and scientific journals in a way that patients may be interested in can enable more people to access accurate information.

The fact that most of our patients (64.8%) have decreased disease severity following social media suggestions may suggest that these recommendations are helpful and according to treatment guidelines. However, most of those who respond to dermatological diseases on frequently used social media platforms are people who are not related to health.¹⁵ In fact, comprehensive studies are needed to determine how many of these recommendations are correct and from which sources the information is obtained. It may be necessary to use social media so that patients can get the most accurate information about their diseases from specialist doctors.

Participants had the most confidence in dermatologists regarding their diseases and treatment (81.1%). Although the patients trusted their dermatologists, they applied for social media consultation. The reasons for this may be: First, they may not be completely sure of their own discourse, and secondly, they may want to learn about the experiences of other people with the same disease because they have a chronic and recurrent disease, or they may have been curious about alternative treatment methods. The spread of accurate information on social media by dermatologists can be an advantage for patients. Patients often complained that their illness lacked satis-

factory treatment, had a frequent recurrence, caused dandruff and itching, and caused self-esteem problems. It may be due to the lack of curative therapy for SD, which we frequently encounter in our dermatology practice.¹⁵

LIMITATIONS OF THE STUDY

Our limitations are that women experienced more in our research, and the number of participants was small.

CONCLUSION

As a result, patients with SD frequently use social media in search of treatment. Therefore, it may be essential for dermatologists to share information about SD on social media and inform patients correctly. However, this study showed that the majority of patients with SD were not satisfied with the effectiveness of treatments. We believe this can be solved by further research into SD etiopathogenesis and treatment.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Hüsna Güder, Semih Güder; **Design:** Hüsna Güder, Semih Güder; **Control/Supervision:** Semih Güder, Hüsna Güder, Nazan Taşlıdere; **Data Collection and/or Processing:** Hüsna Güder, Semih Güder, Nazan Taşlıdere; **Analysis and/or Interpretation:** Semih Güder, Hüsna Güder; **Literature Review:** Nazan Taşlıdere, Hüsna Güder; **Writing the Article:** Hüsna Güder, Semih Güder; **Critical Review:** Hüsna Güder, Semih Güder.

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