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The Influence of Social Media on Seborrheic Dermatitis Treatment: A Cross-Sectional Study

Sosyal Medyanın Seboreik Dermatit Tedavisi Üzerindeki Etkisi: Kesitsel Bir Araştırma

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ÖZET

Amaç: Bu çalışmanın amacı seboreik dermatit hastalarının hastalıkları ile ilişkili olarak internet ve sosyal medya kullanım alışkanlıklarını, internet ve sosyal medya kullanımının altında yatan nedenleri ve kullandıkları tedavi önerilerini araştırmaktır.

Gereçler ve Yöntem: Seboreik dermatit hastalarından sekiz sorunun yer aldığı bir ankete cevap vermeleri ve bunun yanı sıra yaş, cinsiyet ve hastalık sürelerini belirtmeleri istendi. Hastalık şiddetini değerlendirmek için seboreik dermatit alan şiddet indeksi kullanıldı.

Bulgular: Bu çalışmaya göre, seboreik dermatit hastaları sıklıkla (%79,7) tıbbi olmayan tedavi önerilerine başvurmaktadır. Kadınların interneti ve sosyal medya'yı erkeklerden daha fazla kullandığı ve 18-32 yaş grubunun interneti ve sosyal medya'yı daha büyük yaş gruplarından daha fazla kullandığı görülmüştür (sırasıyla p<0.001, p=0.023). İnternet ve sosyal medya'dan edinilen en yaygın tedavi önerisi reçetesiz satılan bir üründür (%89,6). İnternette bilgi edinmek için en sık kullanılan çevrimiçi platform Google (%44,8), en çok tercih edilen sosyal medya'yı baktarını ise İnstagram (%36,2) olmuştur. İnternetten ve sosyal medya'dan tedavi ile ilgili tavsiye alanların ise temel nedeni hastalıkları ve hastalıklarının tedavisi hakkında bilgi almaktı. Hastaların çoğunluğu (%78,9) hastalıklarının başarılı bir şekilde tedavi edilebilmesi için doktorlarını en güvenilir kaynak olarak görmektedir.

Sonuç: Seboreik dermatite sahip hastaların bir klinisyene danışmadan önce tedavi tavsiyesi alma eğiliminde olduğu görülmektedir. İnternet ve sosyal medya araçları hastaların tedavi arayışında önemli bir rol oynamaktadır. Günlük klinik pratikte seboreik dermatite sahip hastaların özellikle reçetesiz satılan ürün kullanımı açısından sorgulanması gerekmektedir. Katılımcıların en çok dermatoloğa güvenmesi ve çevrimiçi platformlardan alınan tedavi tavsiyelerinden memnun olmamaları, klinisyenlerin çevrimiçi platformlarda seboreik dermatit ile ilgili daha çok güvenilir ve doğru bilgi vermeleri gerektiğini ortaya koymaktadır.

Anahtar Kelimeler: Reçetesiz ilaçlar, seboreik dermatit, sosyal medya

ABSTRACT

Objectives: This study aimed to investigate the internet and social media usage habits of seborrheic dermatitis patients in relation to their diseases, the underlying reasons for internet and SM usage, as well as the treatment advice they used.

Materials and Methods: Patients with seborrheic dermatitis were asked to answer a questionnaire consisting of eight questions and provide their age, gender, and disease duration. The seborrheic dermatitis area severity index was used to assess disease severity.

Results: According to this study, seborrheic dermatitis patients frequently (79.7%) turn to nonmedical treatment options. It was observed that females used the internet and SM more frequently than males and patients aged 18-32 years used the internet and SM more frequently than older age groups (p<0.001, p=0.023, respectively). The most common treatment recommendation from the internet and social media was an over-the-counter product (89.6%). Google was the most frequently (44.8%) used online platform for garnering information on the internet, while Instagram was the most preferred (36.2%) social media platform. The main reason for those who received treatment advice from the internet and social media was to get information about their disease and its treatment. The majority (78.9%) consider their doctors to be the most reliable source for the successful treatment of their disease.

Conclusion: Patients with seborrheic dermatitis tend to seek treatment advice before consulting a clinician. Internet and social media tools play an important role in treatment seeking. In daily clinical practice, patients with seborrheic dermatitis should be questioned especially in terms of over-the-counter product use. The fact that the participants trusted the dermatologist the most and were dissatisfied with the treatment advice received from online platforms leads to the need for clinicians to provide more reliable and accurate information about seborrheic dermatitis on online platforms.

Keywords: OTC drugs, seborrheic dermatitis, social media

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INTRODUCTION

The Internet and social media (SM) are now widely used by the masses for communication and information sharing. In daily clinical practice, it is observed that some of the patients use SM as platforms to search for symptoms and treatment of their disease before consulting a clinician, as well as to read comments about their disease and share their experiences with others. The information that patients obtain from SM about their disease may be medical information shared by health professionals (HPs) or complementary to this medical information, or conversely, it may be misleading (1,2). In the field of dermatology, it has been reported that patients frequently use the internet and SM to search for chronic skin diseases such as acne, psoriasis, atopic dermatitis, and skin cancers (3).

Seborrheic dermatitis (SD) is a chronic skin disease characterized by erythematous squamous lesions on the scalp, face and chest. SD is common in the community with a prevalence of approximately 1-8%. Although there are pharmacologic agents that provide remission in the treatment of SD, relapses are frequent in the course of the disease (4). Since medical treatment does not provide a cure and the symptoms of the disease can affect quality of life, SD patients may be in search of new treatments. However, there stands a gap in our understanding of how social media specifically impacts SD treatment. This study aimed to investigate the internet and SM usage habits of SD patients in relation to their diseases, the underlying reasons for internet and SM usage, as well as the treatment advices they used.

MATERIALS AND METHODS

Our study was approved by the Research Ethics Committee at Karatay University (date: June 23, 2023;-number: 2023/0008). All of the study procedures abided by the Declaration of Helsinki. Patients with seborrheic dermatitis who presented between June and September 2023 were included in the study. Patients were asked to answer a guestionnaire consisting of 8 questions in addition to age, gender, and disease duration. Patients were asked whether they had received treatment advice before admission to our clinic, whether they had used over-the-counter (OTC) products, self-made products, diet modification, food supplements, or any other treatment advice, how useful the treatment advice was, and from which source they got the treatment advice, what is the treatment recommendation received from online platforms (internet and SM), what is the preferred online platform for treatment, why they prefer online platforms for treatment recommendation, what is the most trusted source for treatment of their disease. and what are the most challenging aspects of their disease. The seborrheic dermatitis area severity index (SDASI) was used to assess disease severity. Patients under 18 years of age and those who had previously used prescription treatment were excluded from the study.

For the continuous variables analyzed, descriptive statistics were documented as frequencies, mean values, standard deviation and minimum and maximum values. Student t test or Mann-Whitney U test was used for continuous variables based on their distribution characteristics. Statistical analysis of the data was done in IBM SPSS statistical version 22 program (IBM, USA). Pearson chi-square was used to compare categorical data between groups. p<0.05 was considered statistically significant.

RESULTS

Of the total 152 patients, 42.8% were male and 57.2% were female. The mean age of the patients was 29.93±10.65 years. The mean duration of disease was 3.59±3.36 years for men and 2.26±2.14 years for women. The disease was mild in 8.5%, moderate in 48.2%, severe in 32.8% and very severe in 10.5% of the patients. Mean Age, Gender, Severity of Illness and Comparison of Age Groups of Social Media Users and Non-Users of the Two Groups are shown in Table 1.

79.7% (n=121) of the patients had used a treatment recommendation before admission. Of the treatment recommendations, 85.9% were OTC products, 12.3% were self-made products, 11.5% were food supplements, and 5.7% were diet modification. 83 patients (68.5%) used only one treatment recommendation, 37 patients (30.5%) used two treatment recommendations together, and 1 patient (<1%) used more than two treatment recommendations together. Our study observed that patients most frequently (47.9%) searched for information about their condition and treatment via SM and the internet (n=58) (Table 2). Internet and SM tools used by the participants are shown in Figure 1.

Patients most frequently (44.8%) searched for information on Google. The most frequently used SM platform was instagram (36.2%), followed by youtube (29.3%), trendyol (8.6%), facebook (6.8%), and tiktok (5.1%). The majority of those who received treatment recommendations from the internet and SM were OTC products (89.6%). There was no significant difference between those who received treatment recommendations from the Internet and SM and those who did not in terms of disease severity and duration (p=0.511, p=0.837, respectively). It was observed that females used the

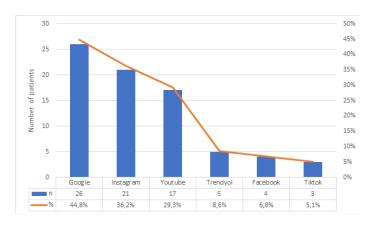


Figure 1. Internet and SM tools used by the participants



Characteristics	Total (n=152)	Consulted internet and SM (n=58)	Did not consult internet and SM (n=63)	Р
	n (%)	n (%)	n (%)	
Age (years) ^b	29.93±10,65	28.96±8,80	31.09±12,07	0.264
Mean± SD				
Age Group (years) ^a	18-32	46 (38)	38 (31.4)	0.023
	32-65	12 (9.9)	25 (20.6)	
Sex ^a				
Female	87 (57.2)	42 (72.5)	25 (39.6)	<0.001
Male	65 (42.8)	16 (27.5)	38 (60.4)	
Disease severity ^a				
Mild	13 (8.5)	6 (10.3)	3 (4.7)	0.511
Moderate	73 (48.2)	24 (41.3)	28 (44.4)	
Severe	50 (32.8)	22 (37.9)	26 (41.2)	
Very severe	16 (10.5)	4 (6.8)	6 (9.5)	

Table 1. Mean Age, Gender, Disease Severity of the Two Groups and Comparison of Age Groups of Social Media

 Users and Non-users

Note. a: Chi-squared test, b: t-test, SD: Standard deviation, SM: Social media

internet and SM more frequently than males and patients aged 18-32 years used the internet and SM more frequently than older age groups (p<0.001, p=0.023, respectively).

Most of the patients (54.5%) who received a treatment recommendation stated that they did not benefit from the treatment at all, 40% partially benefited, and 5% completely benefited. In response to the question "What was your reason for using online platforms for treatment?", 36.2% (n=21) of the patients answered to get information about the disease and its treatment, 27.5% (n=16) answered to search the comments of patients about the treatments they used, 13. 8% (n=8) to ask dermatologists questions about their disease, 13.8% (n=8) for medical care avoidance, and 8.6% (n=5) for other reasons (cosmetic product research and daily skin care research in SD) (Figure 2). To the question "Who is your most trusted source about the treatment of your disease", patients answered dermatologist, family physician, individuals with similar

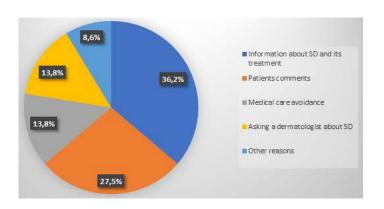


Figure 2. The answers to the question "What was your reason for using online platforms for treatment advice?

complaints, and pharmacist, respectively (78.9%; 10.5%; 7.8%; 2.6%, respectively). To the question "What are the most challenging aspects of your disease", 80.2% of the patients answered itching, 71.7% dandruff, 57.2% frequent recurrence, 46.7% negative impact on social life, 38.1% lack of therapeutic agents, and 19.7% expensive dermocosmetic products.

DISCUSSION

According to this study, SD patients frequently turn to nonmedical treatment options. Internet and SM have a major role in determining treatment recommendations. It was observed that females used the internet and SM more than males and 18-32 age group used the internet and SM more than older age group. The most common treatment recommendation from the Internet and SM was OTC product (89.6%). Google was the most frequently used online platform including internet and SM, while Instagram was the most preferred SM platform. The main reason for those who received treatment advice from the internet and SM was to get information about their disease and its treatment. The majority (78.9%) consider their doctors as the most reliable source for the treatment of their diseases. Google is the most frequently used online search engine (5). Instagram is a SM platform that mainly provides photo and video sharing network services. While Instagram plays an important role in patient education, especially in visual medical branches, it has been reported that the information obtained by patients about their diseases may be misleading due to the conflict of interest (6).

A study by AlGhamdi KM et al. reported that 58.1% of the population used the internet for health-related information research. Internet use was found to be more frequent in the 30-39 age group and in women (7). In a study investigating the use of internet and SM in dermatology patients, it was found that patients most frequently preferred Google and YouTube to obtain medical information. It was reported that patients most



Table 2. Patient survey results

Survey question	Results	n (%)
Did you use any treatment advices before	Yes	121 (79.7)
pplying to our clinic? (n=152)	No	31 (20.3)
Vhat was the treatment advice you used? (n=121)	OTC product	104 (85.9)
	Self-made product	15 (12.3)
	Supplements	14 (11.5)
	Diet modification	7 (5.7)
	Others (spa water, leech therapy)	2 (1.6)
low useful was the treatment		
ecommendation you used?	Never	66 (54.5)
	Partially	49 (40.5)
	Completely	6 (5)
/hat was your source of treatment advice?	Internet and SM	58 (47.9)
	Family or friend	53 (43.8)
	TV	15 (12.4)
	Own thought	7 (5.7)
	Pharmacist	4 (3.3)
	Others (hairdresser, herbalist,	
	beauty sales consultant)	10 (8.2)
Vhat was the treatment advice you received		
rom online platform (SM or internet)? (n=58)	OTC product	52 (89.6)
	Self-made product	3 (5.1)
	Supplements	2 (3.4)
	Diet modification	1 (1.7)
Vhat was your choice of online platform?	Google	26 (44.8)
,	Instagram	21 (36.2)
	Youtube	17 (29.3)
	Trendyol	5 (8.6)
	Facebook	4 (6.8)
	Tiktok	3 (5.1)
Vhat was your reason for using online		
platforms for treatment?	Information about SD and	
	its treatment	(36.2)
	Patients'comments	(27.5)
	Asking a dermatologist about SD	(13.8)
	Medical care avoidance	(13.8)
	Other reasons	(8.6)
Vho is your most trusted source about the		(0.0)
reatment of your disease?	Dermatologist	120 (78.9)
	Family physician	16 (10.5)
	Pharmacist	4 (2.6)
	Individuals with similar complaints	12 (7.8)
Vhat are the most challenging aspects of your disease?	Lack of effective therapeutic agents	58 (38.1)
the the most entrenging uspects of your discuse.	Frequent relapses	87 (57.2)
	Itching	122 (80.2)
	Dandruff	109 (71.7)
	Nedative impact on cocial lite	
	Negative impact on social life Dermocosmetic products	71 (46.7)

Note. OTC: Over-the-counter product, SD: Seborrheic Dermatitis. SM: Social media, TV: Television.



frequently used SM to access medical information, followed by self-diagnosis/treatment, and alternative treatment methods, respectively (3). According to the results of a multicenter study conducted in Turkey examining the use of SM in acne vulgaris, 92.5% of the participants used SM, while the most preferred online platforms were Google and Instagram, respectively. It was reported that the most common reason for applying to SM was to be informed about their disease. In this study, most of the patients reported physicians as the most reliable source of information about their disease (8).

In a study by Kaminski M et al, itching, hair loss, and skin rash were the most frequently searched terms when Google trends data of skin diseases between 2004-2019 were compared. It was emphasized that patients used Google search more frequently for burdensome dermatological diseases (9). Dermatologic diseases searched on Instagram are similar to Google. A study by Braunberger T et al. reported that the most frequently searched dermatologic diseases on Instagram were acne, alopecia, eczema, and psoriasis (10). It has been reported that the majority of posts in the field of dermatology on Instagram are made by non-dermatologist influencers (11).

In a study examining posts about SD on youtube, instagram, and tiktok platforms, it was reported that the highest number of posts were available on youtube. It was found that the majority of the posts were made by non-HPs and often contained misleading information (12). In another study in which youtube content in SD was analyzed, it was reported that although the majority of the posts were made by non-HPs, the content of the posts were mostly misleading, whether HP or not. In this study, it was mentioned that the lack of understanding of the pathogenesis of SD and the lack of effective treatment agents may have led them to treatment recommendations of uncertain reliability as the reason for misleading posts by HPs (13).

In the literature, there is one study from Turkey on the use of internet and SM in patients with SD. In this study conducted in Istanbul, the majority of patients with SD (78.8%) used SM to seek treatment. It was found that females used SM more than males and 18-30 age group used SM more than older age groups (14). In this study, the most frequently used online platforms were instagram (63.6%), youtube, and Google, respectively, which is similar to our study. While the mean age of the patients in Güder H et al's (14) study was similar to our study (26.36 years; 29.60 years, respectively), the rate of SM use in our study (47.9%) was lower than in the previous study. The reason for the lower rate of SM use in our study compared to the previous study may be due to geographical regional differences. In a study conducted by Aslan Kayıran M et al. the rate of internet and SM use in the Marmara region was found to be higher than in other geographical regions of Turkey (15). The fact that women and the 18-32 age group used the internet and SM more frequently in our study is consistent with the study by Güder H et al (14). The fact that instagram was the most frequently used SM platform in our study may be an expected result since the age group that used SM most frequently in the previous study was similar to our

study. Anderson M et al. reported that the most popular SM platforms at a young age were youtube and instagram, which also supports this result (16).

Other results of the previous study on SD include that patients most frequently received OTC product recommendation from SM (54.8%), 35.2% did not benefit at all from the treatment recommendation, the majority of patients were not against the use of SM for their disease, and the most challenging situation for them was the lack of satisfactory treatment for their disease (14). In our study, it was found that 89.6% of those who received treatment recommendations from SM were OTC products, which is higher than the previous study. In contrast to the study of Güder H et al (14), in our study, the most challenging aspects of SD were found to be itching (80.2%) and dandruff (71.7%), respectively. Nowadays, it is seen that most of the OTC products related to SD are generally emphasized to reduce itching and dandruff in their promotion and advertisements on the internet and SM. In our study, the fact that the conditions that challenged the participants in our study differed more in favor of itching and dandruff compared to the previous study may have led to a higher preference for OTC products compared to the previous study. In our study, it was observed that 43.1% of those who received treatment advice from the internet and SM did not benefit from the treatment advice at all, which is similar to the previous study. The finding that dermatologists were the most trusted source of patients in our study is also consistent with the previous studv.

Our study has some differences from the study of Güder H et al (14). First of all, in our study, the reasons why the participants preferred the internet and SM about their diseases were questioned. It was observed that the two most common reasons for this were to get information about their disease and its treatment and to search for the comments of other patients about the treatments they used, respectively. The fact that the most common reason for the use of the Internet and SM by those who received advice from the Internet and SM was the need for information about the disease is consistent with the literature on the use of SM in health-related issues (1,8).

The other different aspects of our study from previous studies (14) on SD are that we investigated from which source patients with SD received treatment advice other than SM, the type of treatment advice, and how much benefit they received from treatment advice. It was observed that patients received treatment advice from family or friends with the second highest frequency after internet and SM. The most common treatment recommendation received from family or friends was OTC product (90.5%), similar to the treatment recommendation received from internet and SM.

The small number of patients and being a single-center study are the limitations of our study. Other limitations of our study include not knowing the educational level and socioeconomic status of the patients. The last 2 factors may have affected patients' preference for online platforms and their perception of over-the-counter products. However, our study is valuable in terms of showing the effects of the internet



and SM on SD, which is common in the society.

CONCLUSION

To the best of our knowledge, this is the second study investigating the effects of internet and SM on patients about SD treatment. Patients with SD tend to seek treatment advice before consulting a clinician. Internet and SM tools play an important role in treatment seeking. In daily clinical practice, patients with SD should be questioned especially in terms of OTC product use. In this study, the fact that the participants trusted the dermatologist the most and were dissatisfied with the treatment advice received from online platforms leads to the need for clinicians to provide more reliable and accurate information about SD on online platforms. It is important to emphasize that SD is a chronic and relapsing disease, that treatment recommendations from sources other than clinicians may have unpredictable results, that OTC products are often insufficient to reduce relapses and that they are not an alternative to prescribed treatment. The introduction of more effective therapeutic agents in the future compared to current SD treatment may reduce patients' resort to alternative treatment methods. Based on the results of this study, we believe that patients with SD should only rely on information from the clinician, regardless of the online platform.

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