

Dry Needling Treatment in Türkiye: What Does Instagram Whisper to Us?

Türkiye’de Kuru İğneleme Tedavisi: Instagram Bize Ne Fısıldıyor?

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ABSTRACT Objective: Dry needling is an invasive treatment method that physicians use frequently and can be applied for different indications. In this study, the analysis of the posts obtained by using hashtags related to dry needling on Instagram has been made. **Material and Methods:** On January 01, 2021, the authorship and content analysis of the posts were obtained by questioning the hashtags of #kuruigne, #kuruigne, #kuruigneleme, #kuruignetedavisi, and #kuruignetedavisi was performed. For each hashtag queried, the “Top 9” post set and the most recent 30 posts were included in the study. **Results:** Regarding authorship, 36 of the 97 articles evaluated were shared by physicians (37%) and 53 (55%) by non-physician medical staff. According to the content analysis of the posts, the educational messages were the most popular (58.6%, n=61) content, followed by the advertisements (28.8%, n=30). **Conclusion:** Enforcement authority of invasive treatment methods such as dry needling treatment is given only to physicians in Türkiye. Although it has been clearly stated in the relevant regulations, it has been observed that non-physician healthcare personnel are active on Instagram with educational content and advertising. In this regard, pain management physicians should be more involved in dry needling in their daily practice and on Instagram.

Keywords: Instagram; dry needling; physician

ÖZET Amaç: Kuru iğneleme tedavisi hekimlerin sık başvurduğu, farklı endikasyonlarda uygulanabilen invaziv bir tedavi yöntemidir. Bu çalışmada, Instagram’da kuru iğneleme ile ilgili etiketleri kullanarak elde edilen gönderilerin analizi yapılmıştır. **Gereç ve Yöntemler:** 01 Ocak 2021 tarihinde #kuruigne, #kuruigne, #kuruigneleme, #kuruignetedavisi ve #kuruignetedavisi etiketleri sorgulanarak elde edilen gönderilerin yazarlık ve içerik analizi yapılmıştır. Sorgulanan her etiket için “Top 9” gönderi kümesi ve en son 30 gönderi çalışmaya dâhil edilmiştir. **Bulgular:** Değerlendirmeye alınan 97 gönderinin yazarlık açısından 36’sı hekimler tarafından (%37), 53’ü (%55) hekim dışı sağlık personeli tarafından paylaşılmıştır. Gönderilerin içerik analizine göre eğitim mesajlarının en popüler (%58,6, n=61) içerik olduğu, bunu reklamların takip ettiği (%28,8, n=30) görülmüştür. **Sonuç:** Türkiye’de kuru iğneleme tedavisi gibi girişimsel tedavi yöntemlerinin uygulama yetkisi sadece hekimlere verilmiştir. İlgili yönetmeliklerde net bir şekilde ifade edilmiş olmasına rağmen hekim dışı sağlık personelinin bu konuda gerek eğitimsel içeriklerle, gerek reklam vererek Instagram’da aktif oldukları görülmüştür. Bu konuda, ağrı ile uğraşan hekimlerin günlük pratiğinde ve Instagram’da kuru iğneleme konusunda daha aktif olmaları gerektiğini düşünmekteyiz.

Anahtar Kelimeler: Instagram; kuru iğneleme; hekim

Today, developments in the technological field have also affected the field of health communication, and as a result, communication and information flow have gained speed. The internet, seen as the source of unlimited information, has become one of the essential resources used by the masses in the health field in recent years.¹ When daily searches on the internet worldwide according to their subjects are con-

sidered, it has been found that the topics related to health are investigated at a rate of 4.5%.² The rate of using the internet to search for information about health in Türkiye is striking. According to the Turkish Statistical Institute data, the rates of internet use to search for health-related information in 2013 and 2016 were 56.1% and 66.3%, respectively.³

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Instagram (Facebook, Inc., ABD) is a mobile application developed in 2010 that emerged as a fast and popular photo and video-sharing tool. With an average of 70 million images per day and 300 million active users, it is the leader among similar applications.⁴ Sixty percent of its users visit the Instagram application at least once daily.⁵ Instagram has become an essential platform for educating the public, with its visually rich health messages, its impact on public health crises, and its role in risk communication for natural disasters. It is an application used today by the World Health Organization (WHO) and other public health institutions. WHO shared information about Typhoon Haiyan in the Philippines using Instagram.⁶

Dry needling is one of the methods used to treat myofascial pain syndrome. Its cost-effectiveness, micro-invasive method, and absence of medication have made it increasingly popular in pain management and in the literature.⁷ It is known that anamnesis, physical examination, pre-diagnosis, diagnosis, differential diagnosis, and treatment algorithm, which are available in the medical education system, are also necessary for this treatment. Practitioners should be competent to intervene in side effects and complications that may occur during and after the procedure. However, it is known that professional groups that do not have the legal competence to practice dry needling treatment apply this treatment under the stairs and even advertise on Instagram because of the heavy workload of the criminal law bureaucracy and undeterred sanctions.

Since the social media environment is generally information-oriented open communication channels, misinformation can spread as well as accurate information.¹ In such an environment where everything is produced and spread rapidly, it is crucial to analyze the shares on this platform. In the literature, studies have been conducted in which these posts are analyzed in subjects relating to diabetes, urogynecology, medical aesthetics, fibromyalgia, and exercise behaviour.⁸⁻¹² Our aim in this study is to analyze Instagram shares in Türkiye related to dry needling treatment, which is commonly used by many physicians and can be applied in many indications, and also to increase awareness in this regard.

MATERIAL AND METHODS

The data of the study were obtained from Instagram on January 01, 2021. Hashtags are keywords that users use to tag their posts. A list of hashtags related to dry needling has been created. Since the short hashtags on the subject potentially have a lot of input volume, in addition to the #kuruignelemetedevisi hashtag, the hashtags with enough posts as #kuruigne, #kuruigne, #kuruigneleme, #kuruigneleme, and #kuruignetedavisı hashtags were also questioned. The number of posts for each hashtag was recorded.

Authorship and content analysis was performed on the “Top 9” post set and the last 30 posts for each hashtag queried. The statistical power of the study was strengthened by increasing the sample size. Instagram automatically generates the “Top 9” post set and the list of the most recent posts with a unique algorithm.⁹ Also, it was recorded whether the post was a photo or a short video.

Authors were divided into physician, non-physician medical staff, and medical center categories. When authors did not fit one of these categories, they were defined in the “other” (personal blog, patient) category. The users’ credentials were evaluated as reported on their Instagram accounts or linked websites. The posts’ content types were divided into the following categories: educational, patient experiences, ads, and humor. If the post contained more than one content, it was included in each category it belonged to.⁹ Duplicate posts linked to the same account, posts in a foreign language other than English, posts that were not relevant to the subject, and posts that were tagged but did not mention dry needling in visual or textual content were excluded from the study. YE performed authorship and content analysis, and the authors were reviewed by FB.

As data on Instagram are open to the public, they were exempted from ethics committee review.

RESULTS

A total of 13,170 posts have been obtained. The highest number of shared hashtags was #kuruigneleme (58.8%, n=7,756, Table 1). “Top 9” and “the most recent 30” posts (n=234) were analyzed in terms of au-

TABLE 1: Keywords used during Internet search.	
Total number of posts inquired	
#kuruigne	3,641
#kuruigne	505
#kuruigneleme	7,756
#kuruigneleme	424
#kuruignetedavisi	771
#kuruignelemetedavisi	73

thorship and content type. Of the 97 posts meeting the inclusion criteria in the study, 36 were shared by physicians (37%) and 53 (55%) by non-physician medical staff in terms of authorship (Figure 1). Medical centers made 5 (5%) shares (Figure 1).

In content analysis, it was seen that the educational messages were the most popular (58.6%, n=61), followed by the advertisements (28.8%, n=30) (Figure 2). In the analysis of the contents classified according to the author type, most of the posts sent on

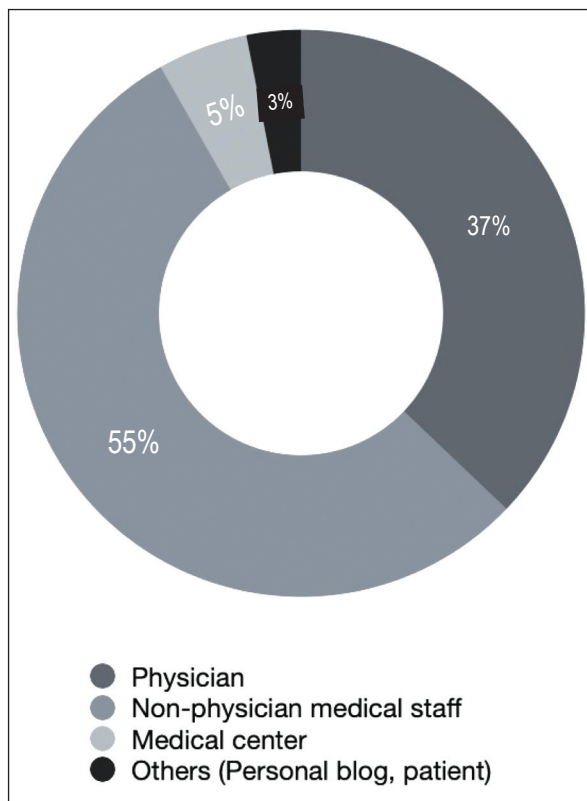


FIGURE 1: The distribution of authors of posts related to dry needling on Instagram.

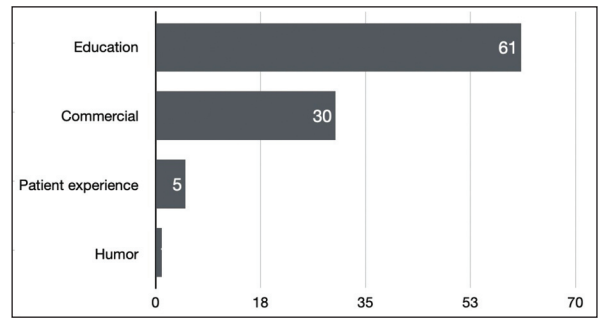


FIGURE 2: Content type of posts about dry needling on Instagram.

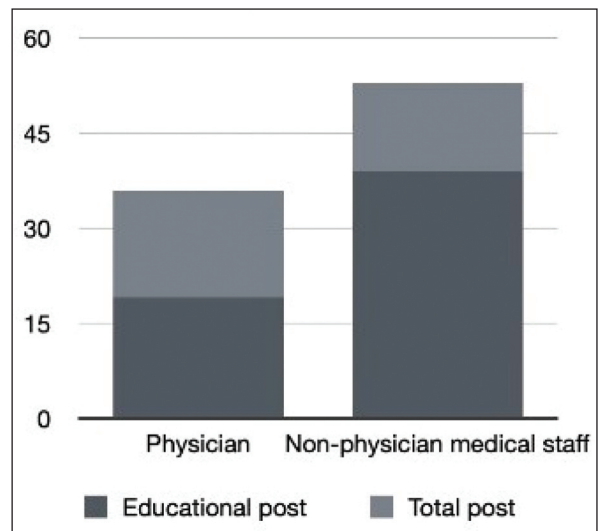


FIGURE 3: Content type according to the authorship of dry needling-related posts on Instagram.

Instagram by 54.5% of physicians, and 75.4% of non-physician medical staff had educational content (Figure 3).

DISCUSSION

As a result of this study, it has been observed that #kuruigneleme had the most shares. Most of the posts were created by non-physicians. Most of the educational content on Instagram was made by non-physicians. According to post-content analysis, educational messages were the most popular, followed by advertisements.

Dry needling treatment, an invasive approach, should be performed by physicians competent in managing a diagnosis, treatment, and complication parameters. According to a definition in legal legis-

lation related to this issue, medical intervention is defined as “physical and mental intervention performed within the boundaries of medical science following the relevant professional standards and obligations for the protection of health, diagnosis, and treatment of diseases by persons authorized to practice the medical profession.” In these definitions, the physician is seen as the practitioner of medical intervention. On the other hand, the legal responsibility of medical intervention is also mentioned. To evaluate the medical intervention under the law, the intervention should be performed by a competent person, directly or indirectly for a legally acceptable purpose such as diagnosis and treatment, the patient’s consent should be obtained, and the intervention should remain within the objective and subjective limits of medicine. In Türkiye, only physicians are authorized to administer invasive treatments. Both laws and regulations should define in more detail who can and cannot perform these treatments and who can and cannot provide training on this treatment method, and making the sanctions more deterrent in case of non-compliance with the rules will facilitate access to those authorized to perform the treatment and ensure patient safety.¹³

The Internet has become the largest and the most up-to-date source for health-related searches.¹ Thanks to the Internet, people who are informed about all health-related issues become more active in managing their health conditions, resulting in improved quality of life. Popular in the health field, Instagram is a platform where millions of videos and photos are shared daily. As a matter of concern, anyone who wants can upload content, and uploaded content can be for-profit, and the control mechanisms are insufficient to analyze the posts. Therefore, it is necessary to analyze posts on a subject sent to this platform.

Instagram provides an accessible, enlightening, and inspiring service for everyone because of its interactive and collaborative design. Cheston et al. showed that using social media in medical education increased participation and general satisfaction levels compared to traditional methods.¹⁴ The application has great potential to serve as a social networking platform in visually rich disciplines such as dermatology, infectious diseases, radiology, and plastic surgery.¹⁵⁻¹⁸ However, the promotion of harmful prac-

tices such as tobacco, alcohol, and the consumption of highly unhealthy foods has also been related to the same visual appropriateness of Instagram.¹⁹⁻²¹ Al-Eisa et al. concluded that using Instagram as a motivational method with a home exercise program can be attractive and effective in strengthening compliance and maintaining an appropriate level of physical activity.²² In our study, most post contents (58.6%) had educational value. Despite the absence of this treatment method in the training curriculum of non-physician healthcare professionals, these posts are sent chiefly from them because they organize dry-needling courses and communicate with each other through information sharing about these courses. However, the diversity of dry needling application methods, such as superficial application, deep application, and intramuscular stimulation described in the literature, may have contributed to the sharing of educational content.

Since 2010, many articles on dry needling treatment have appeared in PubMed. However, it has also been a curiosity on social media platforms. It is known that there are hundreds of thousands of posts worldwide when the search word #Dryneedling is scanned on Instagram. When the search with the keyword #kuruigñeeme is done, more than 5,000 posts are found. Analysis of the posts in our country has shown that non-physician healthcare personnel are more active in this area. While physicians are about one-third of the authors who post on dry needling on Instagram, the fact that most are non-physician medical staff is problematic regarding this treatment. Therefore, pain management physicians should be more active on social media platforms. In addition, Instagram can implement more precise, stringent filtration mechanisms regarding invasive medical treatment methods. Content on social media should be monitored by official institutions or organizations authorized by these institutions and should be allowed to be shared if the accuracy and quality of the content meet the necessary criteria to ensure accurate information for patients.

Topic tags, namely hashtags, help to categorize Instagram posts. Individuals with Instagram accounts use a large number of hashtags to increase their Instagram impressions and followers. All of these may

not be related to the subject matter. In our study, posts that were tagged but did not mention dry needling in visual or text form constituted most of the posts that were excluded from the study. This situation reveals the potential of irrelevant posts on health-related subjects on social media to make an impression on people or even for commercial purposes. Gould et al. suggested that the primary purpose of social media messages should be to educate people, and only one in ten messages should contain advertisements.²³ In our study, it is essential to note that 28.8% of the posts had advertisements.

Our study has some limitations. Instagram hashtags included in the analysis have been inquired for a single date, a limited number of hashtags have been scanned, and hashtags posted only in Türkiye have been analyzed.

CONCLUSION

Pain management physicians should pay more attention to this treatment modality in workshops, symposiums, and congress organizations at the country level, share more educational content on social media platforms, and have a more detailed dry-needling treatment approach in daily practice. There is a need

for studies in which more posts are evaluated using a larger number of hashtags, global-scale analyzes are performed, and that include treatments other than dry needling therapy. Both laws and regulations should define in more detail who can and cannot perform these treatments, who can and cannot train on this treatment method, and make the sanctions more deterrent for non-compliance to facilitate access to those authorized to perform the treatment and ensure patient safety. Official institutions or authorized organizations should monitor social media content for accuracy and quality before allowing it to be shared.

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.

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