

Social media usage among orthopaedic patients: what do they value most in orthopaedic surgeons' accounts?

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ABSTRACT

Aims: Individuals use social media for various health-related purposes, such as gathering information about their illnesses, contacting healthcare professionals, learning about other patients' experiences with doctors, and making informed decisions when selecting doctors. The aims of this study are (I) to evaluate orthopaedic patients' utilisation of social media and (II) to ascertain the factors that are of greatest importance to patients in relation to orthopaedic surgeons' social media accounts.

Methods: A cross-sectional study was conducted with a total of 1018 patients in the orthopaedic outpatient department between November and December 2023. Patients filled out a questionnaire consisting of 15 questions about patients' personal information (gender, age, and education level), social media preferences, social media experiences, and the content of orthopaedic surgeons' social media accounts.

Results: 80.4% of the orthopaedic patients surveyed were actively using at least one social media platform. Within the group of social media users, Instagram stood out as the most preferred platform, with a usage rate of 82.4%. Patients reported that 45.8% believe it is essential for doctors to maintain a presence on social media. Patients were most interested (65.1%) in educational videos on orthopaedic surgeons' social media accounts.

Conclusion: The vast majority of orthopaedic patients are active users of social media, and a significant proportion of orthopaedic patients would like their doctors to have a social media presence. Orthopaedic surgeons should adapt their social media strategies to align with their patient population in order to effectively reach and engage with them.

Keywords: Social media, orthopaedic patients, orthopaedic surgeons, social media usage

INTRODUCTION

As of October 2023, there are 5.3 billion internet users worldwide, with 4.95 billion individuals, constituting 61.4% of the global population, actively using social media.¹ By the year 2027, it is anticipated that the number of individuals utilizing social media will reach 6 billion.² Mobile phones facilitate connectivity and allow mobile phone users to access social media anytime, anywhere.³ It is clear that social media has become an integral part of our daily routines and its impact extends across diverse sectors and plays a crucial role in the realm of medicine.⁴

A considerable number of orthopaedic patients actively participate in social media platforms.^{5,6} The patients use social media for various health-related purposes, such as gathering information about their illnesses, contacting healthcare professionals, learning about other patients' experiences with doctors, and making informed decisions when selecting doctors. Just like their patients, orthopaedic surgeons have not been indifferent to the recent changes in the social media world. The use of social media by orthopaedic surgeons has also reached significant levels.^{7,8} A recent study

of 208 orthopaedic surgeons in Germany reported that all participating orthopaedic surgeons used social media.⁹ Doctors generally use social media platforms for purposes such as communicating with their patients, raising health awareness, sharing information on preventive health issues and enhancing their reputation. Irrespective of its intended purpose, it has become a common communication tool for both patients and orthopaedic surgeons.

Social media is often a useful research tool in the search for health-related information for patients.¹⁰ Although it is widely used to obtain information, there are still doubts about its use as a source of accurate information due to the lack of restrictions and controls.¹¹ In order to address these concerns, the doctors' account is crucial for the patients. The use of social media has also changed the nature of the doctor-patient relationship. Social media accounts enable patients to reach out to their doctors in a more accessible manner than traditional methods.¹² The social media accounts allow doctors to exert a positive influence on their patients and to foster better relationships with them, thereby increasing the

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number of patients who follow them. Thus, patients receive accurate health information from a doctor, not an unqualified person. However, there is a lack of studies in the literature that examine orthopaedic surgeons' social media accounts. The objective of this study is (I) to evaluate orthopaedic patients' utilisation of social media and (II) to ascertain the factors that are of greatest importance to patients in relation to orthopaedic surgeons' social media accounts.

METHODS

After obtaining ethical approval the Marmara University Faculty of Medicine Clinical Researches Ethics Committee (Date: 06.10.2023, Decision No: 09.2023.1261) our study was conducted with the participation of 1,018 orthopaedic patients at the Orthopedics and Traumatology Outpatient Clinic of Marmara University Hospital in November and December 2023. All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki. The study was designed as a cross-sectional study.¹³

Patients in our country with general health insurance utilize the system known as MHRS (Centralized Hospital Appointment System) to schedule appointments for examinations at state hospitals through phone or internet. Our university hospital is also a state hospital. The study included voluntary patients aged 18 and above who had made an appointment through the MHRS system and attended the orthopedic outpatient clinic. Non-voluntary and illiterate patients were excluded from the scope of the study.

The study was conducted face to face. Patients filled out a questionnaire ensuring the confidentiality of their identity information. The survey consisted of 15 questions regarding patients' personal information (gender, age, and education level), social media preferences, social media experiences, and the content of orthopaedic surgeons' social media accounts.

The study data was evaluated using the SPSS 26 (Statistical Package for the Social Sciences) program for statistical analyses. Descriptive statistical methods, such as mean, standard deviation, median, minimum and maximum values for quantitative variables, and frequency and percentage for qualitative variables, were employed. The normal distribution of the data was assessed using the Shapiro-Wilks test and Box Plot graphs. For quantitative variables with a normal distribution, we used the student T test to compare two groups, the One-way ANOVA test for comparisons involving three or more groups, and the Bonferroni test to determine the group responsible for the difference. For qualitative data comparisons, we used the Chi-square test. We evaluated the results at a significance level of $p < 0.05$ with a 95% confidence interval.

RESULTS

The study was conducted with a total of 1018 participants, of whom 563 (55.3%) were women and 455 (44.79%) were men. The age of the participants ranged from 18 to 69 years, with a mean age of 39.10 ± 12.81 years. The educational backgrounds of the patients are given in Figure 1. The study revealed that 80.4% of orthopaedic patients surveyed reported using at least one social media site. Patients preferring to use social media

are shown in Figure 2. The responses of 818 patients utilizing social media to evaluate their social media experiences are presented in Table 1, and what patients consider to be more important regarding the content of doctors' social media accounts is detailed in Table 2.

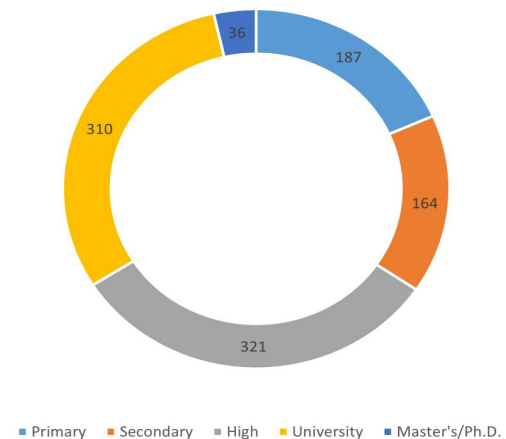


Figure 1. The educational backgrounds of the patients

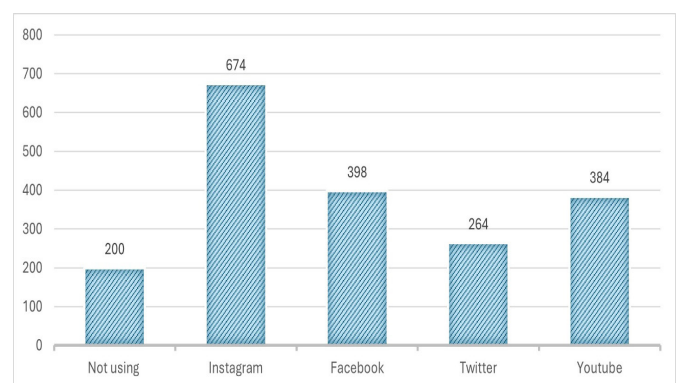


Figure 2. Patients' social media use

*Participants could give more than one answer to this question

Table 1. The social media experiences of the patients

	n/(%)
Have you ever asked a question to the doctor on social media?	
Yes	183 (22.4)
No	635 (77.6)
Do you search for your doctor on social media or the internet before coming to the hospital?	
Yes	205 (25.1)
No	613 (74.9)
Is it important for you that your doctor has a social media account?	
Yes	375 (45.8)
No	443 (54.2)
Do you pay attention to the doctor's profile picture?	
Yes	283 (34.6)
No	535 (65.4)
Is the doctor's number of followers important to you?	
Yes	292 (35.7)
No	526 (64.3)

The age averages of social media users were statistically significantly lower than those of non-users ($p = 0.001$; $p < 0.01$). Specifically, within the social media user groups, only individuals using Facebook showed a statistically significantly higher age compared to non-users, while the age averages of users on other social media platforms were lower than those

Table 2. The importance of content on doctors' social media accounts

		n (%)
How important are the comments under doctor posts to you?	Not important	118 (14.4)
	Slightly	63 (7.7)
	Medium	188 (23)
	Important	268 (32.8)
	Very important	181 (22.1)
How important are posts about the doctor's private life to you?	Not important	466 (57.0)
	Slightly	89 (10.9)
	Medium	132 (16.1)
	Important	98 (12.0)
	Very important	33 (4.0)
How much do the comparative x-rays of patients before and after treatment affect you?	Not important	77 (9.4)
	Slightly	59 (7.2)
	Medium	153 (18.7)
	Important	314 (38.4)
	Very important	215 (26.3)
How much do the comparative photos/videos of patients before and after treatment affect you?	Not important	114 (13.9)
	Slightly	74 (9.0)
	Medium	161 (19.7)
	Important	294 (35.9)
	Very important	175 (21.4)
How important are the doctor's informational video shares about diseases for you?	Not important	67 (8.2)
	Slightly	56 (6.8)
	Medium	163 (19.9)
	Important	309 (37.8)
	Very important	223 (27.3)
Do you do research on the internet about which university your doctor graduated from?	Not important	164 (20.0)
	Slightly	66 (8.1)
	Medium	179 (21.9)
	Important	241 (29.5)
	Very important	168 (20.5)
How important are other patients' comments about your doctor for you?	Not important	81 (9.9)
	Slightly	49 (6.0)
	Medium	172 (21)
	Important	285 (34.8)
	Very important	231 (28.2)
How important is social media for you when choosing your doctor?	Not important	232 (28.4)
	Slightly	90 (11.0)
	Medium	223 (27.3)
	Important	171 (20.9)
	Very important	102 (12.5)

of non-users ($p=0.031$) ($p<0.01$). The ages of participants who previously asked questions to doctors through social media were statistically significantly lower than those who did not ask questions ($p=0.001$; $p<0.01$). The ages of participants who searched for their doctors on social media or the internet before going to the hospital were statistically significantly lower ($p=0.002$; $p<0.01$).

The evaluation based on educational backgrounds revealed that the usage of Instagram, Twitter, and YouTube was statistically significantly higher among university and doctorate graduates ($p=0.001$; $p<0.01$). In contrast, Facebook usage was statistically significantly lower among university and doctorate graduates compared to other educational groups ($p=0.001$; $p<0.01$). A statistically significant difference was found between the responses to the question 'Have you ever asked a doctor a question on social media?'. University graduates are more likely to answer 'yes' than primary, secondary and high school graduates. ($p=0.001$; $p<0.01$) A statistically significant difference was found between the answers to the question 'Have you searched for your doctor on social media or the internet before coming to the hospital?'. The rate of university and doctorate graduates answering yes is higher than primary, secondary and high school graduates ($p=0.001$; $p<0.01$). "Is it important for you that your doctor has a social media account?" There was a statistically significant difference in the responses to the question.". The rate of answering "yes" of university graduates and doctoral graduates is higher than those who have secondary and high school education. ($p=0.001$; $p<0.01$).

DISCUSSION

With the age of technology, the use of social media has become mainstream among orthopaedic patients. The majority of orthopaedic patients actively use social media. The results of the evaluation conducted among social media users indicated that Instagram is the platform with the highest level of user preference. Orthopaedic patients express a desire to see orthopaedic surgeons on social media. Orthopaedic patients highlight the importance of educational videos about ailments on orthopaedic surgeons' accounts.

The use of social media continues to increase day by day. In a study conducted by Curry et al.⁵ in 2014, the internet usage rate among orthopedic patients was reported to be 51%. Pazarıcı et al.¹⁴ observed that the prevalence of social media use among orthopaedic patients was 39% in 2015. Aydin et al.¹⁵ reported a social media usage rate of 83% among surgical patients, including orthopaedic patients, in their studies. The results of this study showed us that 80.4% of orthopaedic patients use social media. Thorne et al.¹⁶ reported the social media usage rate of orthopedic surgeons as 74.4% in their study in 2020. In a study conducted by Youssef et al.⁹ in 2023, evaluating the social media usage of 208 orthopedic and trauma surgeons, it was reported that all participants used social media. Evaluating our results with the literature, it is now clear that social media has become a widely used communication tool for both orthopaedic patients and orthopaedic surgeons. A critical issue for patients is easy access to their doctors. In their study, Duymus et al.⁶ found that 46.7% of orthopaedic patients believed that orthopaedic doctors should communicate with patients through the internet. In this study, 45.8% of patients responded yes to the question "Is it important for your doctor to have a social media account?". Social media makes it easy for patients to reach and communicate with their doctor. The fact that patients can get in touch with their doctors more easily makes them feel more confident. Orthopaedic patients

therefore find it important for their doctor to have a social media account.

In today's world, there are many different social media platforms, with Facebook, Instagram, Twitter and YouTube being the most prominent and popular.¹⁷ Aydın et al.¹⁵ found that Instagram was the most popular platform among patients, used by 62%. Freiburger et al.¹⁸ reported Facebook as the most preferred platform among patients (84%), with a notably higher usage among older adults. In our study, which involved a relatively young cohort, Instagram was the most frequently used social media platform (82.4%). Pazarıcı et al.¹⁴ reported in their studies that internet use increases with increasing educational level. Gencer et al.¹¹ reported an association between the increase in the level of education and internet usage, as well as social media habits. Our findings also indicate that an increase in educational attainment is correlated with social media use. Among social media users, individuals with lower educational levels tend to prefer Facebook, whereas those with higher educational levels favor other platforms. Demographic factors such as age and education significantly influence patients' social media usage and preferences. With this understanding, orthopaedic surgeons serving specific demographics can more effectively reach patients by selecting social media platforms that align with their patients' age and educational backgrounds. For instance, arthroplasty operations are usually performed for the elderly population, an orthopedic surgeon who performs arthroplasty operations can reach more patients through Facebook. Informational videos about arthroplasty and potential complications posted by orthopaedic surgeons on Facebook can be useful for older patients. Similarly, an orthopedic surgeon specializing in sports surgery may prefer Instagram to reach a large number of young athletes. Training information provided via Instagram can help prevent possible injuries to athletes.

The profile of a social media account is a crucial element in the expression of who you are and what you have to offer in the digital world. Users create their own profiles, which usually contain their profile pictures, biographies (personal information), posts, and comments about these posts. People's first impressions are shaped by these profiles. Kliezt et al.¹⁹ conducted a study by creating a plastic surgery account to assess the specific interests of plastic surgery patients on social media. The study found that patients paid considerable attention to personal posts, aesthetic surgery topics, and medical conditions, while scientific posts received relatively low engagement. Freiburger et al.¹⁸ reported that orthopaedic patients demonstrated the highest level of interest in educational videos and medical information, with engagement rates reaching 62%. In this study, we investigated what patients are most interested in on orthopaedic surgeons' social media accounts. The patients expressed that the educational videos on the social media accounts of orthopedic surgeons were most important for them (65.1%). Many people use social media to access information, but one of the biggest drawbacks of social media is the lack of restrictions and controls on the information available.¹¹ For this reason patients believe they can access accurate information about their conditions from

doctors' social media accounts. This is also true for orthopaedic patients, who expect their doctors to share informative videos about their diseases on their social media accounts. In contrast to the plastic surgery patients, orthopedic patients indicated that posts related to the doctor's private life were not significant for them (67.9%).¹⁹ Furthermore, patients have indicated that the profile picture and number of followers of their doctor are not significant factors in their decision-making process. The results of this study demonstrate that orthopaedic patients prefer to view their doctors as reliable sources of accurate information rather than as phenomena on social media. In Türkiye, the Ministry of Health introduced a regulation in 2023 mandating that health-related information shared on social media must be provided exclusively by legally authorized healthcare professionals. The regulation explicitly prohibits any content-even from licensed practitioners-that describes medical treatments or procedures lacking scientific validation or established clinical evidence. It also bans all forms of explicit and implicit advertising in the healthcare sector. These measures aim to curb misleading health claims and prevent unethical commercial exploitation within the field.

The advent of social media has introduced a novel dimension to the relationship between doctor and patient. Nevertheless, one constant persists: the desire of patients to place trust in their doctors. The posts made by doctors on their social media accounts, the results of the patients they have previously treated, and comments made by other patients can collectively increase patients' trust in doctors. 64.7% of the patients participating in our study reported that pre- and postoperative X-Rays shared by doctors on their social media accounts are important for them. Such social media posts of the doctors give patients an idea of the doctors' abilities and experiences in this field. 63% of the patients considered comments made by other patients about their doctors as important or very important. Positive comments from a previous patient about their doctor are likely to increase new patients' confidence in their doctors. In the view of Gencer et al.,¹¹ sharing information about doctors' CVs is crucial for patients' trust. In this study, 50% of the patients stated that the educational background of their doctors is significant to them. Therefore, sharing personal information in the bios of orthopaedic doctors' social media accounts, such as graduation details, specialties, and areas of expertise, can also increase patients' trust in their doctors. In other words, when used appropriately, social media can serve as an effective tool for fostering trust-based relationships between patients and physicians.

Limitations

Our study has several limitations. A major limitation is that it is a single-centre, cross-sectional study and it may not be sufficient to understand the general population. Another limitation is that our study was conducted in a university hospital, which is a government hospital. If the same questions were repeated in a private hospital, the results might be different because, as we know from our study, socio-demographic characteristics influence social media use.

A multicentre study that includes both private and public hospitals may provide more accurate results.

There are no comprehensive studies on the evaluation of orthopaedic surgeons' social media accounts from a patient perspective. The present study has been carried out in order to fill this crucial gap. Our study of a very large-scale group of patients has revealed the social media preferences of orthopaedic patients and their expectations of their doctors. With this information, orthopaedic surgeons will be able to better engage with their patients and meet their expectations by using social media more effectively.

CONCLUSION

As a result, our study demonstrates that social media is widely used by orthopaedic patients. Many patients value their doctors having a social media presence. This makes communication more accessible. It also helps establish trust. Furthermore, it allows patients to reach accurate medical information more easily. Preference for different social media platforms varies with demographic factors such as age and education level. This suggests that orthopaedic surgeons should adapt their social media strategies to align with their patient population in order to effectively reach and engage with them. For surgeons primarily treating geriatric patients, Facebook facilitates easier patient outreach, whereas those serving younger patient groups tend to be more effective by utilizing Instagram and other social media platforms. Although social media offers a valuable platform for patient education and physician-patient interaction, it is essential that physicians use it responsibly and ensure the accuracy and credibility of the information they share.

ETHICAL DECLARATIONS

Ethics Committee Approval

The study was carried out with the permission of the Marmara University Faculty of Medicine Clinical Researches Ethics Committee (Date: 06.10.2023, Decision No: 09.2023.12615).

Informed Consent

All patients signed and free and informed consent form.

Referee Evaluation Process

Externally peer-reviewed.

Conflict of Interest Statement

The authors have no conflicts of interest to declare.

Financial Disclosure

The authors declared that this study has received no financial support.

Author Contributions

All of the authors declare that they have all participated in the design, execution, and analysis of the paper, and that they have approved the final version.

REFERENCES

- Internet and social media users in the world 2023 | Statista. Accessed December 4, 2023. <https://www.statista.com/statistics/617136/digital-population-worldwide/>
- Number of worldwide social network users 2027 | Statista. Accessed December 4, 2023. <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>
- Deng Z, Liu S. Understanding consumer health information-seeking behavior from the perspective of the risk perception attitude framework and social support in mobile social media websites. *Int J Med Inform.* 2017;105:98-109. doi:10.1016/J.IJMEDINF.2017.05.014
- Malyavko A, Kim Y, Harmon TG, et al. Utility of social media for recruitment by orthopaedic surgery residency programs. *JBJS Open Access.* 2021;6(3):e21.00076. doi:10.2106/JBJS.OA.21.00076
- Curry E, Li X, Nguyen J, Matzkin E. Prevalence of Internet and social media usage in orthopedic surgery. *Orthop Rev.* 2014;6(3):5483. doi:10.4081/or.2014.5483
- Duymus TM, Karadeniz H, Çaçan MA, et al. Internet and social media usage of orthopaedic patients: a questionnaire-based survey. *World J Orthop.* 2017;8(2):178-186. doi:10.5312/wjo.v8.i2.178
- Duymuş TM, Karadeniz H, Şükür E, Atıç R, Zehir S, Azboy İ. Social media and Internet usage of orthopaedic surgeons. *J Clin Orthop Trauma.* 2017;8(1):25. doi:10.1016/J.JCOT.2016.10.007
- Justinia T, Alyami A, Al-Qahtani S, et al. Social media and the orthopaedic surgeon: a mixed methods study. *Acta Inform Medica.* 2019;27(1):23-28. doi:10.5455/aim.2019.27.23-28
- Youssef Y, Scherer J, Niemann M, Ansorg J, Back DA, Gehlen T. Social media use among orthopedic and trauma surgeons in Germany: cross-sectional survey study. *JMIR Form Res.* 2023;7(1):e45665. doi:10.2196/45665
- Montemurro P, Porcnik A, Hedén P, Otte M. The influence of social media and easily accessible online information on the aesthetic plastic surgery practice: literature review and our own experience. *Aesthetic Plast Surg.* 2015;39(2):270-277. doi:10.1007/S00266-015-0454-3
- Gencer B, Doğan Ö, Çulcu A, et al. Internet and social media preferences of orthopaedic patients vary according to factors such as age and education levels. *Health Info Libr J.* 2024;41(1):84-97. doi:10.1111/hir.12503
- Gross CE, Scott D, Samora JB, Khan M, Kang DG, Frank RM. Physician-rating websites and social media usage: a global survey of academic orthopaedic surgeons: AOA critical issues. *J Bone Jt Surg Am Vol.* 2022;104(2):1-6. doi:10.2106/JBJS.20.01893
- Sharma A, Tran Minh Duc N, Luu Lam Thang T, et al. A consensus-based checklist for reporting of survey studies (CROSS). *J Gen Intern Med.* 2021;36(10):3179-3187. doi:10.1007/s11606-021-06737-1
- Pazarıcı Ö, Gölge UH, Çamurcu Y, Saygılı H, Kılınc S, Keskinbıçkı MV, Korkmaz M. Internet use by orthopedic and traumatology patients in Turkey. *Cumhur Tıp Derg.* 2015;37(4):269-275. doi:10.7197/CMJ.V37I4.5000124235
- Aydin MA, Gokcen HB. Factors considered by patients in provider selection for elective specialty surgery: a questionnaire-based survey. *Int J Surg.* 2019;69:43-48. doi:10.1016/j.ijsu.2019.07.007
- Thorne D, Burton C, Tulloch S. Australian orthopaedic surgeons and social media: the future of education and communication? *AMJ.* 2020; 13(7):239-246. doi:10.35841/1836-1935.13.7.239-246
- De Martino I, D'Apolito R, McLawhorn AS, Fehring KA, Sculco PK, Gasparini G. Social media for patients: benefits and drawbacks. *Curr Rev Musculoskelet Med.* 2017;10(1):141-145. doi:10.1007/s12178-017-9394-7
- Freiberger C, Kale NN, Gallagher ME, Ierulli VK, O'Brien MJ, Mulcahey MK. Patients prefer medical facts and educational videos from sports medicine surgeons on social media. *Arthrosc Sport Med Rehabil.* 2023;5(3):e649-e656. doi:10.1016/j.asmr.2023.03.004
- Klietz ML, Kaiser HW, MacHens HG, Aitzetmüller MM. Social media marketing: what do prospective patients want to see? *Aesthetic Surg J.* 2020;40(5):577-583. doi:10.1093/asj/sjz204