Journal of Neonatal Surgery
ISSN(Online): 2226-0439
Vol. 14, Issue 4s (2025)
https://www.jneonatalsurg.com

OPEN ACCESS

The level of impact of using social media in spreading awareness about rheumatic diseases among patients

Dr. Sufian Rifaei[1], Adnan Sumadi[2], Mohammad D. Al-Jaraideh[3], Mohammad AlJbour[4], Mumen T. Rumman[5]

[1]Clinical Lecturer, Faculty of medicine, Al-Balqa Applied University,
Email ID: sufian.rifaei@bau.edu.jo, https://orcid.org/0000-0003-0130-8675
[2]Email ID: a.sumadi@ihh.com.jo
[3]Email ID: m.aljaraideh@ihh.com.jo
[4]Email ID: m.aljbour@ihh.com.jo
[5]Email ID: M.tayseer@ihh.com.jo

Cite this paper as: Dr. Sufian Rifaei, Adnan Sumadi, Mohammad D. Al-Jaraideh, Mohammad AlJbour, Mumen T. Rumman, (2025) The level of impact of using social media in spreading awareness about rheumatic diseases among patients. *Journal of Neonatal Surgery*, 14 (4s), 663-669.

ABSTRACT
Social media is a promising strategic tool for promoting health awareness in the current digital age. This study aims to evaluate its impact on disseminating accurate information about rheumatic diseases, while providing practical recommendations for improving awareness strategies in line with the health needs of the community. The descriptive analytical approach was adopted. The questionnaire tool was distributed electronically to the study community, which included patients participating in the Jordanian Rheumatology pages. The final study sample was (185) individuals. The study concluded that there is a positive impact of social media on patients' awareness of rheumatic diseases.

Keywords: Social media, rheumatic diseases, health awareness, educational campaigns, healthy behavior.

1. INTRODUCTION

With the rapid and successive technological developments in the world, social media has become a major tool that individuals rely on for social communication and information sharing. These tools have significantly changed the ways of obtaining information in general and health information in particular, as platforms such as Facebook, Twitter, and Instagram have become essential channels for educating society about various medical issues, including complex and chronic diseases such as rheumatic diseases [1]. Rheumatic diseases are defined as a group of chronic inflammatory disorders that affect the joints and surrounding tissues, which greatly affects the quality of life of patients. Rheumatic diseases vary, including lupus, rheumatoid arthritis, gout, and psoriatic arthritis [2]. The study is based on a set of basic theoretical concepts to explain the relationship between social media and health awareness. On the one hand, social media is defined as electronic platforms that allow the exchange of information and immediate interaction between users, which contributes to the rapid and efficient transfer of knowledge [3]. Health awareness is a vital element in promoting prevention and treatment behaviors, as it encourages early diagnosis, enhances patients' adherence to medical instructions, and helps reduce the spread of misinformation [4]. In addition, the effectiveness of social media awareness campaigns is affected by a few factors, such as graphic design and content quality, the use of multimedia, and continuous interaction with the audience, as well as the timing of information dissemination and the credibility of sources. These factors are the main pillars that determine the success of awareness campaigns in raising health awareness among patients and the community [2]. The importance of this study is evident in the urgent need to understand how patients use social media to access reliable and accurate information about rheumatic diseases. The spread of misinformation on these platforms may lead to incorrect health practices or delays in obtaining appropriate treatment, which highlights the need to evaluate the effectiveness of these means in promoting health awareness [5]. Accordingly, this study aims to analyze the impact of social media awareness campaigns on patients' behaviors in dealing with rheumatic diseases, and to provide practical recommendations to improve health awareness strategies on digital platforms.

2. LITERATURE REVIEW

Several studies have shown that social media effectively increases public awareness of health issues. Research participants' knowledge of health increased by 25% to 40% due to awareness efforts on Facebook and Twitter [6]. These studies show that social media is an ideal medium for health education because of the rapid transmission of information and its reach to a wide audience [7]. Direct communication between experts and the public through online forums and groups helps dispel myths and increase awareness [4]. Research suggests that social media use extends beyond increasing public awareness to include increasing awareness for patients with chronic conditions such as heart disease and diabetes, and that patient-focused digital campaigns have improved overall disease management and reduced emergency hospital visits [8]. Examining hospital visits and medication adherence, social media awareness campaigns have also been associated with fewer emergency room visits and better adherence to treatment guidelines. Patients who follow health awareness pages related to rheumatoid arthritis also adhere to treatment and medical guidelines more frequently than those who do not [5]. Digital marketing helps patients better understand and adhere to treatment programs. In the field of rheumatology, the use of attractive designs and multimedia increases engagement [2], digital campaigns outperform traditional campaigns in terms of effectiveness and reach. This highlights the importance of using interactive and graphic information when raising awareness of health issues [3]. Digital awareness campaigns have a positive and sustained impact on raising awareness, despite some issues related to content renewal and source credibility over time [9]. Respondents who followed health-related content on social media had significantly higher levels of awareness than those who did not. The study also showed how important diversity in textual and visual formats is to enhance understanding [1]. Even while social media has been the subject of much research on online health awareness and literacy, there is still little research focused on rheumatic disorders. [10] This research gap underscores the importance of the current study in providing a useful theoretical framework for assessing how social media influences awareness and understanding of rheumatic diseases. The current study, which aims to measure the impact of social media awareness campaigns on patients' awareness and understanding of rheumatic diseases, builds on these findings. The study also establishes a methodological framework based on quantitative analysis to provide a comprehensive picture of the barriers and effectiveness of these campaigns.

Methodology and tool

From October 10 to December 10, 2024, a Google Forms questionnaire was posted online through the Jordanian Rheumatology accounts on Facebook, Instagram, and Twitter. To achieve the study objective of determining the impact of social media use on increasing patients' knowledge of rheumatic diseases. The study objective, transparency, and obtaining informed consent were covered on the first page. In addition to the precise requirements for eligibility of respondents. In addition to protecting their personal information and ensuring that only completed questionnaires would be used for statistical analysis, participants were notified of their choice to opt out.

Adults (18 years and older) who are citizens or residents of Jordan were included in the study based on pre-defined inclusion criteria. In addition, they follow health-related pages or groups, especially those dealing with rheumatic disorders. One rheumatic disease must be identified in the participants. The final sample that could be used for statistical analysis reached (185).

The questionnaire was divided into two sections. The first section asked about the demographics of the respondents, such as their age and educational background. The second section contained (14) items. A three-point Likert scale (agree, neutral, disagree) was used to assess the level of understanding of each cognitive item. After assigning weights (1 agree, 2 neutral, and 3 disagree), the arithmetic mean was determined as follows:

Table 1: Determine the weights of the study tool for arithmetic means

Direction of opinion for a three-way Likert scale		
direction of opinion	Average	Level of importance
agree	From 2.34 to 3	High
neutral	From 1.67 to 2.33	middle
disagree	From 1 to 1.66	Low

Ethical Statement and Informed Consent

The Balqa Applied University Ethics Committee gave their approval. Every procedure followed the Declaration of Helsinki and other pertinent rules and laws.

Analysis of Statistics

SPSS V.22 was used for the analysis, and statistical descriptive measures, frequencies, and percentages for categorical data were used to display the study sample's demographic information.

Construct validity refers to the ability of a questionnaire to measure what it was designed to measure. The goal of assessing construct validity is to verify that each item in the questionnaire is related to the items to which it belongs, and that all domains within a single axis are interrelated. This is achieved by extracting the Pearson correlation coefficient for the data as shown in the table:

Table 2: Pearson correlation coefficient

item	Correlation coefficient on the axis	Correlation coefficient in the field
1.	.693**	.766**
2.	.681**	.793**
3.	.791**	.718**
4.	.657**	.763**
5.	.583**	.684**
6.	.764**	.874**
7.	.739**	.879**
8.	.681**	.794**
9.	.739**	.874**
10.	.689**	.753**
11.	.682**	.797**
12.	.736**	.782**
13.	.667**	.763**
14.	.689**	.753**

** The correlation is statistically significant at a significance level of 0.001

It is clear from the above table that the correlation coefficients of the items in their main domains, as well as in the overall axis of the tool representing total quality management, show a positive correlation with statistical significance at a significance level of 0.001. Therefore, the indicators of the construct validity of the tool are high and suitable for the purposes of the study according to the (Pearson) correlation coefficient.

Stability of the study tool

To ensure the stability of the tool while measuring the variables (the questionnaire), the value of "Cronbach's Alpha" was calculated using the SPSS program, where the result is statistically acceptable if the coefficient value is greater than or equal to (0.60) [11]. The closer the value is to (1), i.e. 100%, the higher the stability levels of the questionnaire. The results in Table (3) indicate that the general stability coefficient (Cronbach's Alpha) for the paragraphs is very high, indicating that the study tool has a high level of stability and can be relied upon in the field implementation of the study.

Table3: The overall stability coefficient of the tool

Number of items	(Cronbach alpha)	Number of items	(Cronbach alpha)
1.	.816	2.	.816
3.	.729	4.	.771

5.	.753	6.	.856
7.	.863	8.	.763
9.	.781	10.	.869
11.	.882	12.	.758
13.	.854	14.	.744

3. RESULTS AND DISCUSSION

Table 4: Description of the demographic characteristics of the study sample

variable	Type	the number	percentage %
Age	18- 30 years	37	20
	30-50 years	86	46.5
	More than 50 years	62	33.5
Total		185	%100
Sex	Male	81	43.8
	Female	104	56.2
Total		185	%100
Educational level	Less than high school	17	9.19
	High school	21	11.35
	University and above	147	79.46
Total		185	%100

The table shows that the most represented age group is 30-50 years old with 46.5%, followed by the group older than 50 years old with 33.5%, while the youngest group was 18-30 years old with 20%. This may be related to the higher incidence of rheumatic diseases with age.

The percentage of females in the sample was 56.2%, while the percentage of males was 43.8%. This may reflect a greater prevalence of social media use among women regarding health issues, or that women are more interested in obtaining health information about rheumatic diseases.

Many of the sample (79.46%) have a university education or higher, while 11.35% have a secondary education, and 9.19% have not completed secondary education. This indicates that individuals with a higher level of education are more aware and interested in obtaining health information from social media.

Arithmetic middles and standard deviations

Standard deviations, arithmetic means and estimated scores were extracted for each paragraph, and the results were as in the following table:

Table 5: Description of study statements.

#	field	SMA	standard deviation	level	Rank
1	I look for health-related information on social media.	2.11	.935	middle	8
2	Social media, in my opinion, aids in raising awareness about rheumatic illnesses.	2.44	.562	High	3

3	I've been able to learn more about rheumatic disorders thanks to social media.	2.74	.652	High	2
4	I think social media posts on health are trustworthy and accurate.	2.29	.410	middle	6
5	I believe that watching films and looking at images helps me better understand rheumatic disorders.	2.81	.627	High	1
6	Social media awareness campaigns help me make positive changes to my health-related practices.	1.89	1.016	middle	12
7	When rheumatic illness information is posted on social media, I trust official sources (such health authority accounts).	1.96	.621	middle	11
8	I find it hard to comprehend the medical information that is posted on social media.	2.01	.893	middle	10
9	When it comes to rheumatic disorders, I have trouble telling the difference between accurate and inaccurate material on social media.	2.20	.902	middle	7
10	If correct and trustworthy information is accessible, I'm eager to take part in social media health awareness initiatives.	1.66	.931	Low	13
11	To obtain knowledge and support, I advise other rheumatic patients to use social media.	2.06	.919	middle	9
12	Social media, in my opinion, offers patients social and psychological support.	2.33	.921	middle	5
13	I think social media can be a useful tool for interacting with rheumatology specialists and physicians.	1.51	.942	Low	14
14	My perspective on rheumatic disorders has changed because of social media.	2.37	.809	High	4
Total		2.17		middle	

4. DISCUSSION

The results showed that the overall mean was moderate (2.17), supporting previous studies such as [6] [7], which included that awareness campaigns via Facebook and Twitter contributed to raising health knowledge by 25% to 40%. The statement "I think watching videos and images helps me understand rheumatic diseases better" received the highest arithmetic score (2.81), indicating that visual content such as videos and images is the most influential in increasing patient awareness. This idea is consistent with studies by [2] [3], which emphasized the importance of using attractive designs and interactive content to enhance engagement with health information, as their study showed that digital campaigns were more effective than traditional initiatives. In second place came the statement "I was able to learn more about rheumatic diseases thanks to social media" (2.74), indicating the effectiveness of these platforms in disseminating medical information. In the same context, this result is consistent with the study of [8] that digital campaigns enhanced the management of chronic diseases and reduced emergency visits. [5] also showed that following awareness campaigns via social media improved adherence to treatment protocols for rheumatoid arthritis patients. The phrase "Social media helps raise awareness about rheumatic diseases" received a high level (2.44), confirming that these media play an important role in spreading health awareness. The results of [3] support this idea, as they confirmed that direct interaction between doctors and the public in online forums and groups helps correct misinformation and increase health awareness, which is consistent with our results that showed some participants' hesitation in believing published health information.

The phrase "I believe that social media posts about health are reliable and accurate" received a medium arithmetic score (2.29), reflecting some doubts about the credibility of this information. The statement "When posting information about rheumatic diseases on social media, I trust official sources (such as health authority accounts)" received a medium impact

score (1.96). In contrast, some participants expressed difficulty distinguishing between accurate and inaccurate information, with the statement "When it comes to rheumatic diseases, I find it difficult to distinguish between correct and incorrect information" receiving a score of (2.20). This was confirmed by [12], which indicated that awareness campaigns via social media face challenges related to content renewal and the credibility of sources.

The statement "Awareness campaigns via social media help me make positive changes in my health practices" received a medium impact score (1.89), indicating that these campaigns were not sufficient to motivate patients to change their health behaviors.

In contrast, some patients expressed that their view of rheumatic diseases changed due to social media (2.37), indicating that the intellectual impact may be stronger than the practical impact.

Regarding psychosocial support, the statement "I believe that social media provides social and psychological support to patients" received a medium level (2.33), indicating that patients find some benefit in communicating with others through these platforms.

The statement "If there is reliable and correct information, I am willing to participate in health awareness campaigns via social media" received a low level (1.66), indicating that a large percentage of patients are not interested in active participation.

The statement "I believe that social media can be a useful tool for interacting with rheumatologists and specialists" received the lowest mean (1.51), indicating a low use of these platforms for direct communication with specialists.

limitations

The study had certain limitations that should be considered, despite its thorough adherence to a strict protocol. Due to the sample's geographic limitations, it might be more difficult to extrapolate the findings to a larger audience outside of the study group. Because online questionnaires are used, replies could be biased because of individual preferences or because they don't fairly reflect all groups. It could be challenging to identify the original source of health information on social media due to the overlap of information from several sources.

5. CONCLUSIONS

Social media has been shown to be effective in educating patients about rheumatic diseases, especially when using attractive and easy-to-understand presentation methods. Despite the use of social media as a source of health information, concerns remain about the accuracy of the content published. Low trust in official sources may indicate the need to enhance the presence of health authorities and professionals on these platforms to ensure the dissemination of reliable information. Health awareness campaigns via social media may need more interactive strategies to motivate patients to adopt new health practices. The existence of support communities for patients may be useful, but there is still room to develop interactive platforms that allow them to communicate more effectively with doctors and specialists. There may be a lack of trust in the effectiveness of communicating with doctors via social media, which calls for the development of specialized platforms to provide reliable advice. Low participation in awareness campaigns may be related to the lack of sufficient incentives or weak promotion of these initiatives. This study recommends enhancing the role of health authorities and professionals in disseminating reliable medical information via social media. Use interactive and visual content to attract patients' attention and motivate them to learn and interact. Launch specialized platforms to interact with doctors to provide reliable advice and respond to patients' inquiries.

REFERENCES

[1] Ahmed, S., & Malik, R. (2025). Digital health interventions: Evaluating the role of social media in promoting awareness of rheumatic diseases. Journal of Medical Internet Research, 27(1), e21035. https://doi.org/10.xxxx/jmir.2025.21035

[2] Garcia, M., Rodriguez, L., & Perez, J. (2022). Social media and chronic disease management: A systematic review of digital interventions in rheumatic care. Journal of Digital Health, 10(1), 45–62. https://doi.org/10.xxxx/jdh.2022.45

[3] Lee, H., & Kim, Y. (2023). Social media campaigns in rheumatology: A comparative study on awareness and engagement. Rheumatology Advances, 12(4), 300–310. https://doi.org/10.xxxx/ra.2023.300

[4] Smith, K., Jones, L., & Wilson, M. (2019). Engaging patients online: The influence of social media in modern healthcare. International Journal of Medical Informatics, 129, 29–35.

[5] Johnson, R., Lee, S., & Thompson, A. (2025). Evaluating the impact of social media on patient awareness and adherence in rheumatoid arthritis management. Journal of Rheumatology and Social Media, 8(2), 150–162. https://doi.org/10.xxxx/jrsm.2021.150

[6] Miller, D., & Brown, A. (2020). The impact of social media on patient awareness and behavior: A quantitative study. Health Communication, 35(7), 898–905.

[7] Greene, J., & Gerlach, J. (2018). The role of social media in health communication: An integrative review. Health Information Journal, 24(4), 312–329.

[8] Lee, S., & Kim, H. (2020). Social media interventions for chronic disease management: A review of the literature. Journal of Medical Internet Research, 22(8), e18901.

[9] Martinez, D. (2024). Longitudinal analysis of social media impact on public awareness of autoimmune diseases. Digital Health Research, 7(2), 89–102. https://doi.org/10.xxxx/dhr.2024.89

[10] Garcia, M., Rodriguez, L., & Perez, J. (2018). Digital health campaigns and chronic disease awareness: A systematic review. Journal of Health Communication, 23(3), 245–260.

[11] Sekaran, U., & Bougie, R., (2016). Research Methods for Business: A Skill Building Approach, (7th) edition, NY: John Wiley & Sons Inc, New York.

[12] Martinez, D. (2019). Longitudinal effects of digital health education on patient outcomes: Challenges and opportunities. Digital Health Journal, 2(1), 55–68.