

HEALTHCARE PROVIDERS' COMMUNICATION ON SOCIAL MEDIA AND TRUST IN ONLINE HEALTH INFORMATION: AN EXPLORATORY CROSS-SECTIONAL SURVEY AMONG ROMANIAN ADULT SOCIAL MEDIA USERS

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Abstract: *This study aimed to assess Romanian adults' perceptions of healthcare providers' communication on social media and to examine the association between these perceptions and trust in providers' online health-related information. A quantitative, cross-sectional survey was conducted between 31 January 2026 and 25 May 2026 using an original structured online questionnaire with 5-point Likert-scale items. A convenience sample of 205 adult respondents who reported using social media and having previously accessed healthcare services was analyzed. Composite perception and trust scores were calculated by averaging the corresponding Likert-scale items. Internal consistency was assessed using Cronbach's alpha, and Spearman correlation analysis was performed. Most respondents lived in urban areas (70.2%), and 59.5% were female. The perception scale showed excellent internal consistency (Cronbach's alpha = 0.930), while the trust scale showed good internal consistency (Cronbach's alpha = 0.862). A strong positive association was observed between perception and trust scores (Spearman $\rho = 0.786$, $p < 0.001$). Frequency of accessing healthcare-related information on social media was also positively associated with perception scores ($\rho = 0.343$, $p < 0.001$) and trust scores ($\rho = 0.433$, $p < 0.001$). The findings suggest that favorable perceptions of healthcare providers' communication on social media are associated with higher trust in providers' online health-related information, but should be interpreted as exploratory associations rather than causal effects.*

Key words: *social media; healthcare communication; patient trust; digital health; health services management*

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1. Introduction

The rapid digitalization of healthcare has reshaped the ways in which patients access information and interact with healthcare providers [1, 5]. Social media platforms have become prominent channels for disseminating health-related content, promoting services, and facilitating communication between patients and providers.

In the present study, social media communication refers to health-related information, service promotion, educational content, and patient-oriented messages disseminated by healthcare providers or healthcare organizations through platforms such as Facebook, Instagram, YouTube, TikTok, and other digital platforms. The study did not address telemedicine consultations, electronic medical records, or direct clinical care delivered through digital platforms.

The increasing adoption of social media in healthcare communication reflects broader trends in digital transformation within health systems. Social media platforms enable healthcare organizations to disseminate information rapidly, interact with patients beyond clinical encounters, and support health promotion initiatives. Previous research has suggested that digital communication tools may contribute to improved accessibility of health-related information, particularly for digitally active populations.

At the same time, the expansion of social media in healthcare raises important concerns regarding the quality and reliability of medical information available online. The rapid dissemination of content without systematic quality control mechanisms increases the risk of

exposure to misinformation, which may negatively influence health-related decision-making. In addition, the public nature of social media platforms raises ethical concerns related to confidentiality, professional boundaries, and data protection.

From a health systems management perspective, social media communication represents both an opportunity and a challenge. While digital platforms offer cost-effective channels for outreach and patient engagement, they also require the development of institutional strategies, staff training, and governance frameworks to ensure the accuracy and appropriateness of online communication. Understanding how patients perceive healthcare communication on social media and how these perceptions are related to trust in healthcare providers is therefore relevant for informing managerial decision-making and communication strategies.

In addition to supporting information dissemination, social media communication has been increasingly linked to organizational reputation and public image in healthcare. Studies have reported that an active and transparent social media presence may positively influence patients' perceptions of provider image and institutional credibility, while inconsistent or poorly managed online communication may negatively affect organizational reputation. These aspects further emphasize the managerial relevance of understanding patients' perceptions of healthcare communication on social media [1], [3], [5].

Previous research has highlighted both opportunities and risks associated with social media use in healthcare, including enhanced reach and engagement, alongside

concerns regarding information credibility, misinformation, data privacy, and professional boundaries [1], [4], [9-11].

Digital communication has become an important component of contemporary healthcare systems, supporting organizational communication strategies and patient engagement [2], [7], [12, 13]. However, evidence regarding how social media communication is related to patients' perceptions of healthcare services and trust in providers remains heterogeneous, particularly in Eastern European contexts.

Although social media has been widely studied in healthcare communication, less is known about how adults in Eastern European contexts perceive healthcare providers' communication on social media and how these perceptions are associated with trust. This context is relevant because digital health adoption, institutional communication practices, and patterns of social media use may differ across regions. Therefore, examining this association in a Romanian adult sample may provide useful insights for healthcare communication and management strategies.

The present study aimed to examine the association between Romanian adults' perceptions of healthcare providers' communication on social media and their trust in providers' online health-related information.

2. Material and Methods

A quantitative, cross-sectional exploratory study was conducted between 31 January 2026 and 25 May 2026. Data were collected using an original structured online questionnaire distributed through social media platforms. The target

population consisted of adults who used social media and had previously accessed healthcare services.

Eligible participants were adults aged 18 years or older who reported using at least one social media platform, had accessed healthcare services at least once, and agreed to participate voluntarily. Respondents who did not provide consent, did not use social media, or submitted incomplete questionnaires for the main study variables were excluded from the corresponding analyses.

The questionnaire was developed for the present study based on previous literature on digital health communication and social media use in healthcare. It included sociodemographic questions, questions regarding the use of social media for healthcare-related information, and 15 Likert-scale items assessing perceptions of healthcare providers' communication on social media and trust in providers' online health-related information. The Likert scale ranged from 1 = strongly disagree to 5 = strongly agree.

The questionnaire addressed general perceptions of healthcare providers' and healthcare organizations' communication on social media rather than communication with one specific healthcare professional. Platform-related questions included Facebook, Instagram, YouTube, TikTok, and other platforms.

The questionnaire did not collect diagnostic information or detailed data on specific medical specialties. Therefore, the analysis focused on general perceptions of healthcare communication on social media rather than on disease-specific or specialty-specific interactions. This approach was consistent with the exploratory aim of the study and with the intention to assess broader patterns of

trust and perception among adult social media users.

The perception composite score was calculated as the mean of 11 Likert-scale items assessing clarity, usefulness, transparency, perceived influence on provider choice, communication intensity, perceived quality of services, patient orientation, provider image, patient satisfaction, inclusion of social media in communication strategies, and perceived improvement of patient-provider relationships. The trust composite score was calculated as the mean of 4 Likert-scale items assessing trust in providers' information shared on social media, perceived safety, influence of other patients' recommendations, and perceived credibility of medical information.

Internal consistency was assessed using Cronbach's alpha. Descriptive statistics were used to summarize sample characteristics and questionnaire responses. Spearman correlation analysis was used to examine associations between perception scores, trust scores, and frequency of accessing healthcare-related information on social media. Exploratory subgroup analyses were performed according to age group and education level using non-parametric tests.

Statistical significance was set at $p < 0.05$. The study adhered to ethical principles applicable to non-clinical research involving human participants. Participation was voluntary, and informed consent was obtained electronically prior to questionnaire completion.

3. Results

3.1. Sample characteristics

The analytical sample comprised 205 respondents. Most respondents resided in

urban areas (144/205; 70.2%), and 122 respondents were female (59.5%). The largest age groups were 25–34 years (49/205; 23.9%), <25 years (47/205; 22.9%), and 35–44 years (44/205; 21.5%). Respondents aged 45 years or older represented 30.8% of the sample. Regarding education, after recoding multiple responses according to the highest educational level reported, 79 respondents (38.5%) had higher education, 76 respondents (37.1%) had secondary education, and 49 respondents (23.9%) had postgraduate education. A concise overview of the sample characteristics is provided in Table 1.

Table 1
Sample characteristics of respondents

Characteristic	Category	n	%
Gender	Female	122	59.5
	Male	80	39.0
	Prefer not to say	1	0.5
	Missing	2	1.0
Age group	<25 years	47	22.9
	25–34 years	49	23.9
	35–44 years	44	21.5
	45–54 years	28	13.7
	≥55 years	35	17.1
	Missing/multiple	2	1.0
Residence	Urban	144	70.2
	Rural	57	27.8
	Multiple response	2	1.0
	Missing	2	1.0
Education	Secondary education	76	37.1
	Higher education	79	38.5
	Postgraduate education	49	23.9
	Missing	1	0.5

Note: Values are presented as counts (n) and percentages (%). Some questions allowed multiple selections. Percentages may not total 100 due to rounding. When multiple education categories were selected, respondents were classified according to the highest educational level reported.

3.2. Use of social media for healthcare-related information

Regarding the platform used most frequently for healthcare-related information, the predefined categories were Facebook, Instagram, YouTube, TikTok, and other platforms. The most frequently selected platform was Facebook (59/205; 28.8%), followed by other

platforms (53/205; 25.9%), Instagram (36/205; 17.6%), YouTube (27/205; 13.2%), and TikTok (27/205; 13.2%). Most respondents reported accessing healthcare-related information on social media occasionally (98/205; 47.8%), followed by frequently (41/205; 20.0%), rarely (31/205; 15.1%), very rarely (19/205; 9.3%), and very frequently (9/205; 4.4%).

Which social media platform do you use most frequently for health-related information?
202 răspunsuri

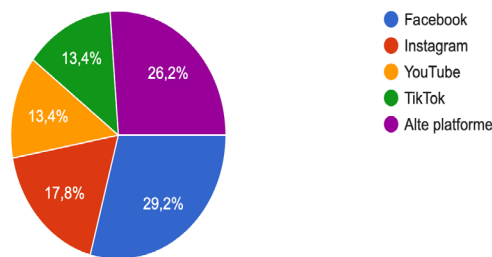


Fig. 1. Social media platforms used to obtain healthcare-related information

After excluding missing or multiple-frequency responses, frequency of accessing healthcare-related information on social media was positively associated with the perception composite score (Spearman $\rho = 0.343$, $p < 0.001$) and with the trust composite score (Spearman $\rho = 0.433$, $p < 0.001$).

3.3. Perceptions of healthcare providers' communication on social media

Mean Likert scores showed higher values for items related to accessibility and perceived usefulness of information. Descriptive statistics for perception-related and trust-related items are presented in Table 2, while the overall perception score is illustrated in Figure 2.

Descriptive statistics for perception and trust items

Table 2

Item	Mean	SD
Information about healthcare services on social media is easy to understand	3.78	0.93
Social media is an effective communication channel between providers and patients	3.74	1.05
Social media communication increases providers' transparency	3.82	1.02
Medical information on social media influences my choice of provider	3.40	1.13
Providers should use social media more intensively to communicate with patients	3.69	1.11
I trust information posted by healthcare providers on social media	3.32	1.04
Social media communication provides a sense of safety in the patient-provider relationship	3.39	1.04

Item	Mean	SD
Other patients' recommendations/comments influence my trust in medical services	3.45	1.19
Medical information posted on social media is credible	3.41	0.99
Effective social media communication improves perceived quality of healthcare services	3.51	1.02
Providers active on social media are perceived as more patient-oriented	3.41	1.10
Social media presence positively influences providers' image	3.72	1.02
Digital communication contributes to my patient satisfaction	3.61	1.08
Social media should be included in healthcare communication strategies	3.76	1.03
Effective digital communication strategies can improve patient-provider relationships	4.00	1.02

Note: Likert scale: 1 = strongly disagree; 5 = strongly agree.

The internal consistency of the perception scale was excellent (Cronbach's alpha = 0.930; 11 items), while the trust scale showed good internal consistency (Cronbach's alpha = 0.862; 4 items). The overall internal consistency of the 15 Likert-scale items was excellent (Cronbach's alpha = 0.947).

Information about health services presented on social media is easy to understand.
204 răspunsuri

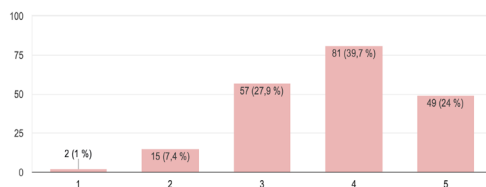


Fig. 2. Overall perception of healthcare communication on social media

3.4. Trust in provider-related information shared on social media

Trust-related items showed moderate mean scores, ranging from 3.32 to 3.45, with variability across items. The distribution of trust scores is shown in Figure 3.

Trust in healthcare providers' information shared on social media.
203 răspunsuri

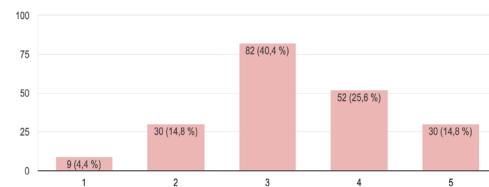


Fig. 3. Trust in healthcare providers' information shared on social media

3.5. Associations between social media use, perceptions, and trust

A strong positive association was observed between the perception composite score and the trust composite score (Spearman $\rho = 0.786$, $p < 0.001$, $n = 204$).

Table 3
Association between perception and trust composite scores

Variables compared	Spearman ρ	p-value
Perception composite score × Trust composite score	0.786	$p < 0.001$

Exploratory subgroup analyses showed that perception scores did not differ significantly across age groups (Kruskal-Wallis $p = 0.073$), and trust scores also did not differ significantly by age group ($p = 0.079$). Education level was significantly associated with perception

scores ($p = 0.033$), but not with trust scores ($p = 0.392$). Frequency of accessing healthcare-related information on social media was positively associated with both perception and trust scores.

Table 4
Exploratory associations between sociodemographic characteristics and composite scores

Variable	Perception score	Trust score	Statistical test
Age group	$p = 0.073$	$p = 0.079$	Kruskal–Wallis test
Education level	$p = 0.033$	$p = 0.392$	Kruskal–Wallis test
Frequency of accessing healthcare-related information on social media	$\rho = 0.343$; $p < 0.001$	$\rho = 0.433$; $p < 0.001$	Spearman correlation

Note: Perception and trust scores were calculated as composite mean scores. Spearman correlation was used for ordinal frequency of social media use. Kruskal–Wallis tests were used for comparisons across age and education groups.

4. Discussion

The present study provided empirical evidence regarding Romanian adults' perceptions of healthcare communication on social media and their association with trust in healthcare providers' online health-related information. The findings indicated a strong positive association between perceptions of digital communication and trust, highlighting the potential relevance of social media communication strategies for healthcare organizations.

The distribution of social media platforms used for healthcare-related information showed that respondents

mainly relied on general-purpose platforms. Facebook was the most frequently selected platform, followed by other platforms, Instagram, YouTube, and TikTok. This pattern is consistent with previous studies reporting that mainstream social media platforms represent important sources of health-related content for patients [1], [4, 5]. However, the use of non-specialized platforms for health information seeking may also increase exposure to unverified content, emphasizing the need for healthcare organizations to maintain a credible and professionally managed online presence.

The sociodemographic profile of the sample was more balanced after additional data collection. The sample included respondents from multiple age groups, with 30.8% aged 45 years or older, and more than one quarter of respondents came from rural areas. This broader profile improves the descriptive value of the study compared with a sample composed mainly of young urban respondents, although convenience sampling still limits generalizability.

The increase in sample size from the initially submitted version strengthened the descriptive basis of the study and partially addressed the concern regarding the limited representation of older, rural, and less highly educated respondents. However, because recruitment remained based on convenience sampling and online distribution, the revised sample should still be interpreted as non-probabilistic. Therefore, the findings are most appropriately understood as reflecting Romanian adult social media users who were accessible through online recruitment channels.

Trust in healthcare providers' online

communication showed moderate mean scores, with variability across trust-related items. This finding suggests that respondents expressed some trust in providers' online health-related information, but did not evaluate all credibility-related aspects uniformly. Previous studies have shown that patients value the accessibility and immediacy of online health information, while remaining cautious regarding completeness, credibility, and misinformation [1], [5], [10, 11].

The strong association observed between perceptions of digital communication and trust in healthcare providers suggests that transparent, patient-oriented, and coherent online communication may contribute to trust-building processes in healthcare settings. From a managerial perspective, healthcare organizations may benefit from structured social media communication strategies, staff training, and content governance mechanisms intended to improve the accuracy, clarity, and credibility of online health information. Nevertheless, the cross-sectional design precludes causal inference, and the observed association may reflect reciprocal influences between perceptions and trust.

The strong correlation between perception and trust scores should be interpreted with caution. Although the internal consistency of both scales was good to excellent, the magnitude of the association may partly reflect conceptual overlap between the two constructs, as both were measured using self-reported Likert-scale items within the same questionnaire. Common method bias may also have contributed to the strength of the association. Therefore, the findings should be interpreted as exploratory

associations rather than evidence of a causal effect of social media communication on trust.

The exploratory subgroup analyses provided additional context. Frequency of accessing healthcare-related information on social media was positively associated with both perception and trust scores, suggesting that repeated exposure to online health-related content may be related to more favorable evaluations of providers' digital communication. Education level was associated with perception scores, but not with trust scores, while age group was not significantly associated with either perception or trust scores.

The findings may support healthcare organizations in developing clearer and more consistent social media communication practices. In particular, providers should consider using social media not only for service promotion, but also for patient education, clarification of common health-related questions, and dissemination of reliable information. Establishing internal procedures for content verification may help reduce the risk of misinformation and improve patients' confidence in online communication.

Several limitations should be acknowledged. Although the sample size was increased to 205 respondents during revision, the use of convenience sampling continued to limit the representativeness and generalizability of the findings. Because the questionnaire was distributed online, the sample may overrepresent digitally active adults and respondents already interested in healthcare-related information on social media. The questionnaire did not assess whether respondents referred to communication

from one healthcare professional, multiple healthcare professionals, or healthcare organizations. In addition, the survey did not collect data on the specific health problems, medical specialties, or clinical contexts for which respondents searched information on social media. The category "other platforms" was not further disaggregated, which limited platform-specific interpretation, including the separate assessment of platforms such as WhatsApp or LinkedIn. The cross-sectional design did not allow causal inferences, and all variables were measured using self-reported data, which may have introduced common method bias. Future research should include larger and more diverse samples, detailed platform-specific measures, and information on the type of health concerns motivating online information seeking.

5. Conclusions

The study showed that favorable perceptions of healthcare providers' communication on social media were strongly associated with trust in providers' online health-related information among Romanian adult social media users. The frequency of accessing healthcare-related information on social media was also positively associated with perception scores ($p = 0.343$, $p < 0.001$) and trust scores ($p = 0.433$, $p < 0.001$). These findings suggest that social media may represent a relevant communication channel for healthcare organizations, particularly among digitally active adults. However, the cross-sectional and exploratory design did not allow causal conclusions regarding whether social media communication directly changes patients' trust or behavior. Future studies

should use longitudinal or comparative designs and should assess platform-specific use, type of healthcare provider, and health concerns motivating online information seeking.

Ethical considerations

Participation in the study was voluntary, and informed consent was obtained electronically before questionnaire completion. Respondents were informed that the survey was intended for academic research purposes and that the data would be analyzed in aggregated form. No clinical intervention was performed, and no individual medical records were accessed.

Data availability statement

The data that support the findings of this study are available from the corresponding author upon reasonable request. The dataset is not publicly available because it contains individual survey responses collected for academic research purposes.

Authors' contributions

All authors contributed to the study conception and design, interpretation of results, manuscript revision, and approval of the final version. Data collection, statistical analysis, and initial manuscript drafting were performed by the corresponding author.

Conflict of interest

The authors declare no conflict of interest.

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