

RESEARCH ARTICLE

Trust in social media health sources in Mureș County, Romania

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Objective: This study investigates trust in health-related content sources on social media among Mureș County, Romania residents.

Methods: An online survey was administered using a 23-item questionnaire to assess demographics, frequency of social media usage, and trust in health information sources.

Results: Of the 419 respondents, religious figures emerged as the most trusted source of medical information, followed by doctors. Trust in religious figures was significantly higher among individuals with lower education levels and those who used social media frequently but for short durations. Correlation analysis indicated a weak positive relationship between social media usage and trust in information.

Conclusions: The findings highlight the unexpectedly high relevance of clergy in Romanian communities within such a specialized field, emphasizing the importance of involving trusted local figures in health communication strategies.

Keywords: social media, health information, trust, religious figures, Romania, public health

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Introduction

Over the past decade, social media platforms have emerged as powerful tools for health communication, facilitating the rapid dissemination of medical content, personal experiences, and health promotion messages. Individuals increasingly turn to platforms such as Facebook, Instagram, Twitter, and TikTok to access health-related information, make treatment decisions, or adopt new behaviors [1-3]. According to Ventola, social media enables real-time interaction among patients, caregivers, and health professionals, thus fostering community support and enhancing engagement [3]. However, these platforms also serve as channels for misinformation, which can lead to potentially harmful consequences [4,5]. In Romania, digital health adoption is still evolving, often shaped by informal online networks and community-based trust systems.

Studies have shown that trust in online health information is often influenced by the perceived credibility of the source rather than the content itself [6,7]. This creates opportunities for both accurate and misleading messages to shape public perceptions and behaviors. Information gatekeepers, such as doctors, patients, peers, or religious leaders, become critical [4,5], especially in healthcare-related communication. This divide is more pronounced in rural areas, where digital literacy may be lower and traditional authority figures continue to hold significant influence.

Cultural and religious values greatly influence public trust in Romania, especially in more traditional areas like Mureș County. Past sociological research has shown that high trust in religious leaders often exceeds that in govern-

ment or academic institutions [8]. Additionally, religious figures remain highly visible in both rural and urban communities, usually seen as moral and trustworthy authorities [6,7,9-11]. The combination of traditional authority and digital platforms can strengthen public health messages but can also unintentionally spread unverified advice, especially when religious figures share or endorse content [12]. Religious institutions offer spiritual guidance and shape community norms, including views on medicine, vaccination, and current health practices [6,9].

The COVID-19 pandemic further intensified the use of social media as a health information hub, revealing both its potential and pitfalls [3,5,12].

In Romania, as in many regions of Eastern Europe, public trust in state-led health messaging has faced challenges, creating a vacuum that is often filled by local or religious voices [6,8,9]. Understanding the mechanics of digital trust is essential not only for managing misinformation but also for designing inclusive health campaigns that effectively reach vulnerable or skeptical populations.

Considering how digital habits blend with cultural norms, this study examines social media use for health information in Mureș County. It aims to identify which sources are seen as most trustworthy, providing insight into the trust factors that shape healthcare communication in culturally conservative communities.

While prior studies have examined institutional trust in Romania, few have explored how this trust dynamic manifests within digital health information channels

Methods

A cross-sectional survey was carried out using an online questionnaire targeting residents of Mureș County, Roma-

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nia. The survey was accessible from March 2024 to December 2024. It included 23 items divided into three main sections: demographic details, social media usage patterns, and perceptions of the credibility of health-related content. The questionnaire featured multiple-choice and rating scale questions to gather information on behaviors and trust levels. The authors initially developed the questionnaire in Romanian, drawing from relevant literature and public health practice insights. Two public health communication experts first reviewed it to ensure clarity and relevance. To assess its clarity and cultural fit, the Romanian version was piloted with a small group of respondents (n=10). Feedback from the pilot resulted in minor adjustments to wording and response options to improve clarity and understanding. This study used convenience and snowball sampling methods, enabling quick recruitment through platforms like Facebook and WhatsApp. We recognize that this approach may introduce sampling bias and limit the applicability of the findings to the wider population. Because the study focused on trust dynamics and social media usage patterns, sex and urban/rural residence were not considered relevant variables and were not collected. Participants were asked to identify their most trusted source of health information from a list that included doctors, religious figures, peers, patients, and official representatives. All participants gave informed consent, and the study adhered to the ethical principles in the Declaration of Helsinki. Since it did not involve collecting sensitive medical data, formal approval from an Institutional Review Board (IRB) was not required. Descriptive statistics and correlation analyses (Pearson and Spearman) were performed using Microsoft Excel to explore the relationship between social media use frequency and trust in online health information. Before correlation testing, the normality of trust scores was checked with the Shapiro-Wilk test, which indicated a significant deviation from normality ($W=0.55$, $p<0.001$). Because of this, Spearman's rank correlation coefficient (ρ) was used to account for the non-normal distribution and ordinal data. To ensure clarity and accuracy, language was refined using ChatGPT (OpenAI, GPT-4), and basic calculations and data pattern summaries were performed; however, all analysis and interpretation were conducted independently by the authors.

Results

A total of 419 valid responses were collected and analyzed. Regarding age, 50.2% of participants were between 18 and 25 years old, 22.7% were 26–35 years old, 18.0% were under 18, 5.9% were 36–45 years old, and 2.1% were 46–55 years old. In terms of education, 34.4% of respondents had completed high school, 28.4% had completed middle school or high school without a diploma, 24.4% held a university degree, 12.6% had a master's degree, and 0.2% had a doctorate or post-doctoral degree.

When asked to identify the most trusted source of health-related content encountered on social media, re-

spondents most frequently selected religious figures (45.1%), followed by doctors (31.5%). Less often trusted sources included personal acquaintances (15.7%), patients with similar conditions (4.3%), and official representatives (3.3%). Respondents were asked to identify only one most trusted source of health-related content encountered on social media. The distribution of these responses is shown in Table I.

Regarding the frequency of using social media for health-related purposes, 52.3% of respondents reported using it daily, 27.6% used it a few times a week, 14.8% used it a few times a month, and 5.3% used it rarely or never.

A weak but statistically significant positive correlation was observed between the frequency of social media use for health-related purposes and the trust expressed in online information (Pearson's $r = 0.13$, $p = 0.007$). A corresponding Spearman's $\rho = 0.075$ ($p = 0.124$) indicated a similarly weak but non-significant relationship.

Some variation in educational attainment was observed among respondents who reported trust in different sources, although no formal statistical test was conducted to confirm these differences.

Those who trusted religious figures most frequently tended to have a high school education or less, while those who trusted doctors were more likely to hold a university or postgraduate degree. This is detailed in Table II.

In terms of social media use, doctor-trusters appeared more active, with 61.4% using social media for more than one hour daily, while only 25.4% of respondents who trust religious figures fell into this category. Conversely, 50.3% of respondents who trust religious figures used social media daily but for one hour or less, indicating a more passive interaction with digital platforms. These patterns are shown in Table III.

Overall, the results suggest that education level and digital engagement are weakly associated with the perceived credibility of social media health sources. Priests emerged as dominant trust figures among respondents with lower formal education and less frequent social media use, while doctors were preferred by those with higher education and more intensive online engagement.

Table I. Trust in sources of health information

Source	Number of respondents
Priest	189
Doctor	132
Someone I really like	66
Patient with same condition	18
Official representative	14

Table II. Education level of respondents who trust priests vs doctors

Education level	Priest trusters (%)	Doctor trusters (%)
Middle school or no diploma	29.1	26.5
High school	33.3	32.6
University degree	21.7	29.5
Master's degree	15.9	10.6
PhD or Post-doctorate	0.0	0.8

Table III. Social media (SM) usage frequency by trust group

SM use frequency	Priest trusters (%)	Doctor trusters (%)
More than one hour/day	25.4	15.9
Daily, one hour or less	50.3	59.8
Several times a week	18.5	17.4
Once a week	5.3	4.5
Rarely or never	0.5	2.3

Discussion

This study explored trust in health-related sources on social media among residents of Mureș County, Romania—a region marked by strong cultural traditions and increasing digital engagement. The findings shed light on how individuals prioritize different information sources in online health contexts, with a notable portion of respondents indicating higher trust in religious figures compared to medical professionals.

This trust pattern aligns with broader trends observed in post-communist societies, where traditional figures often retain social authority. However, our study did not capture the specific denomination or institutional affiliation of these figures, so interpretations should remain general regarding religious leadership.

Educational background appeared to vary between trust groups. Respondents who reported greater trust in religious figures tended to have lower levels of formal education, while those who trusted doctors showed a higher incidence of university and postgraduate education. This trend supports prior studies linking higher education to increased trust in expert-based sources and improved digital literacy.

The correlation between frequency of social media use for health purposes and trust in online health information was weak (Pearson's $r = 0.13$, $p = 0.007$), and Spearman's rho was not statistically significant. While limited in strength, the result may reflect modest patterns in how trust and media engagement interact. More digitally active individuals in our sample were more likely to report trust in doctors, whereas those trusting religious figures more often reported lower social media engagement.

These findings indicate that public health messaging in Romania could benefit from culturally sensitive approaches. Religious leaders—regardless of denomination—may serve as influential messengers in health communication if they are properly engaged and informed. Previous studies have demonstrated that, when trained and supported, religious leaders can become effective channels for health promotion.

However, depending on informal authority figures for health advice involves risks. If these figures lack access to accurate information or share unverified content, they may unintentionally spread misinformation. This highlights the need for organized cooperation between health agencies and trusted community leaders.

Digital health literacy remains a significant challenge. Individuals with lower educational levels may be more

susceptible to misinformation online. Efforts to enhance public understanding of health content on social media, particularly among groups less likely to trust official sources, should be a priority in local and national health plans.

An important limitation of this study is that respondents were allowed to select only one trusted health source, which oversimplifies the reality that individuals may rely on multiple sources simultaneously. Additionally, the use of convenience and snowball sampling limits the generalizability of the findings.

While the non-probabilistic sampling approach limits generalizability, this study offers initial insights into how trust and culture influence the reception of health information in Romanian digital spaces. Future research should explore how trust develops across multiple sources simultaneously, and how different actors—such as doctors, clergy, and peers—can work in complementary ways to promote public health understanding.

These findings are situated in a broader context of health literacy challenges in Eastern Europe. Romania has been identified in EU-wide surveys as having among the lowest levels of health literacy. Such conditions may explain why familiar, community-based figures are often turned to for guidance, particularly in the face of complex or unclear institutional messaging.

Conclusion

This study offers significant insights into the interplay between cultural norms, educational background, and trust in health information sources on social media in Mureș County, Romania. The findings indicate that religious figures are the most trusted figures for health-related advice online, even surpassing doctors in a context where religious figures retain high credibility. This trend is particularly pronounced among individuals with lower educational levels and those with shorter, less intense social media usage.

The study highlights how digital health behaviors are shaped not solely by technological access or platform design, but also by deep-rooted social structures, such as the moral authority of the religious figures. These results support prior findings that emphasize the enduring influence of religious figures in public trust dynamics [9,8,10].

From a public health perspective, this suggests that effective communication strategies must be tailored to local trust ecosystems. In communities where institutional distrust is high or where access to scientific expertise is limited, trusted cultural figures such as clergy may serve as vital conduits for health messaging—provided they are given accurate, evidence-based materials and training [12,7]. Public health officials should consider partnerships that respect cultural contexts while safeguarding scientific accuracy. At the same time, caution is needed.

The same authority that makes religious figures influential also enables the rapid and widespread spread of misinformation, especially online where regulation is minimal and content disseminates quickly [4,5]. This highlights the

urgent need for digital health literacy initiatives, especially for populations with lower formal education and limited media skills.

Although the study's reliance on convenience sampling and its cross-sectional design limits its generalizability, it offers valuable empirical evidence in an under-researched area at the intersection of digital communication, culture, and health trust. Future research should investigate the long-term effects of trust-based messaging interventions and consider how hybrid strategies that involve both religious and medical voices could improve the public's access to reliable health information.

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Authors' contributions

IM - Conceptualization, Formal Analysis, Validation, Supervision

DEC - Data curation, Methodology, Visualization

HF - Formal Analysis, Resources, Software

PB - Writing – original draft, Writing – review & editing, Methodology

Conflict of interest

None to declare.

Ethical statement

This study did not require approval by an Institutional Review Board (IRB), as it did not involve any clinical intervention or sensitive personal data.

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