

Analyzing the Impact of Social Media Health-Related Videos on Public Health Behavior

Abstract

This study was conducted to examine the influence of social media health-related videos on public health behavior, focusing on user engagement, credibility assessment, and the behavioral impact of such content. Based on a survey conducted among 101 respondents primarily from the state of Punjab and nearby regions in India, the findings reveal that while users frequently encounter and consume health-related content on platforms like Instagram and YouTube, there is a significant gap in identifying authentic and medically accurate information. Many respondents admitted to trying remedies or self-treatment methods based on such videos, with varying levels of effectiveness and occasional adverse effects. The study highlights the need for stricter content regulation and greater public awareness to mitigate the risks of misinformation.

Keywords: Social Media, Public Health, Health Misinformation, Online Health Behavior, Medical Credibility

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1. Introduction

1.1 Background

Social media platforms have transformed the way health information is accessed and shared. A gradual shift from traditional media to new media has made it more convenient to create awareness about health. Videos offering advice on self-care, home remedies, and treatments for common or serious health conditions have become popular among consumers. Although this easy-to-disseminate and easy-to-access information has potential benefits, it also raises concerns about misinformation and its adverse impact on public health.

“Health misinformation on social media, therefore, urgently requires greater action from those working in public health research and practice. We define “health misinformation” as any health-related claim of fact that is false based on current scientific consensus.” (Chou et al., 2020)

As defined by Vanderpool in his paper on vaccine literacy and misinformation “Notably, exposure to misinformation cannot simply be undone through fact checking, correcting, or debunking efforts: a large body of research has shown that retractions are rarely successful at eliminating reliance on misinformation, a phenomenon known as the “continued influence” effect” (Vanderpool et al., 2020).

1.2 Problem Statement

The unregulated nature of social media content creates a scenario where non-experts often disseminate health advice, leading to risks such as self-medication, delayed professional treatment, and reliance on unverified remedies. As indicated in the social media usages research done in USA, the information credibility on social media is still very low among users as said, “Despite using them for a wide range of reasons, just 3% of social media users indicate that they have a lot of trust in the information they find on these sites” (Smith & Smith, 2024)

1.3 Research Objectives

- i. To evaluate user engagement with health-related videos on social media platforms.
- ii. To examine the credibility of sources and the perceived authenticity of shared information.
- iii. To analyze the behavioral impact of consuming such content, including self-treatment and medical decision-making.

2. Literature Review

Existing studies have highlighted the dual-edged nature of social media as a health information source. Research shows that while it aids in raising awareness, misinformation can lead to harmful practices. “These online dis- and misinformation efforts are especially worrisome, as research has shown that fewer children have been getting routine vaccines since COVID-19 was declared a national emergency” (Vanderpool et al., 2020). Social media usage patterns in India, particularly in Punjab, indicate a growing reliance on platforms for health information, yet studies specific to this region remain limited. This necessitates a focused examination of regional trends and behaviors. The social media platforms are acting as one of the key sources of Infodemic on health IEC. As defined by WHO during the COVID-19 pandemic, “An infodemic, simply put, is an overabundance of information, good and bad. Together, it forms a virtual tsunami of data and advice that makes it hard for people in all walks of life to find clear messages, trustworthy sources and reliable guidance when they need them. Some of it is merely confusing, but some of the misinformation can be actively harmful to life.” (Epidemic and Pandemic Preparedness and Prevention (EPP), 2020) Users who are exposed to health-related misinformation on social media find it difficult to access the correct information easily as the social media algorithms amplify the same genre

of content that the user is already interacting with, this has been defined in detail by Chou et al. (2020) as “Another issue concerns the difficulty of identifying and reaching those who are exposed to misinformation. The diversity and volume of social media facilitate the creation and maintenance of information silos by making it easy for users to self-curate their feeds and find similar content through automated algorithms. These features reduce the likelihood that individuals who are part of a group in which misinformation is circulating will be exposed to content that contradicts the prevailing view of their network.”

3. Methodology

3.1 Study Design

This descriptive study utilized a structured survey to collect quantitative and qualitative data from respondents.

3.2 Sample Population

A total of 101 responses were collected from individuals predominantly based in Punjab and neighboring regions.

3.3 Survey Structure

The survey consisted of 17 questions presented in both Punjabi and English to ensure inclusivity and ease of understanding. The questions covered the following key topics:

- Usage of platforms like Instagram, YouTube, or others for health-related content.
- Frequency of watching health-related videos in the last 30 days.
- Types of content consumed (self-care tips, home remedies, treatment methods, etc.).
- Focus of the videos (common health issues, serious conditions, or both).
- Credibility of information sources (medical professionals, influencers, or others).

- Types of medical approaches discussed (e.g., allopathy, ayurvedic, alternative remedies).
- User perceptions about whether a doctor would recommend such methods.
- Behavioral impact, including trying remedies or consuming medicines without medical advice.
- Effectiveness and ill effects of viral treatment methods.
- Ability to distinguish between authentic and unauthentic medical advice.
- Likelihood of trying viral treatments from non-medical professionals.
- Number of health-related videos encountered daily and their perceived usefulness.
- Opinions on stricter regulations for health content on social media.

3.4 Data Collection and Study Variables

Data was collected via an online survey distributed through Google Forms from 16 January till 23 January 2025. The link was shared on social media platforms and messaging apps to target a diverse group of users. The survey captured demographic variables (age, location) and behavioral variables such as:

- Platform usage for health-related content.
- Types of content consumed.
- Credibility and source of information.
- Behavioral outcomes like trying remedies and self-treatment.

3.5 Confidence Level and Margin of Error

The survey was conducted with a **95% confidence level** and a **±9.75% margin of error**, given the sample size of 101. This margin of error reflects the variability expected in responses when

generalized to the larger population of social media users in the region.

3.6 Statistical Analysis

Descriptive statistics were used to analyze the data. Results were summarized using frequencies and percentages and visualized through pie charts and bar graphs.

4. Results

4.1 Demographics

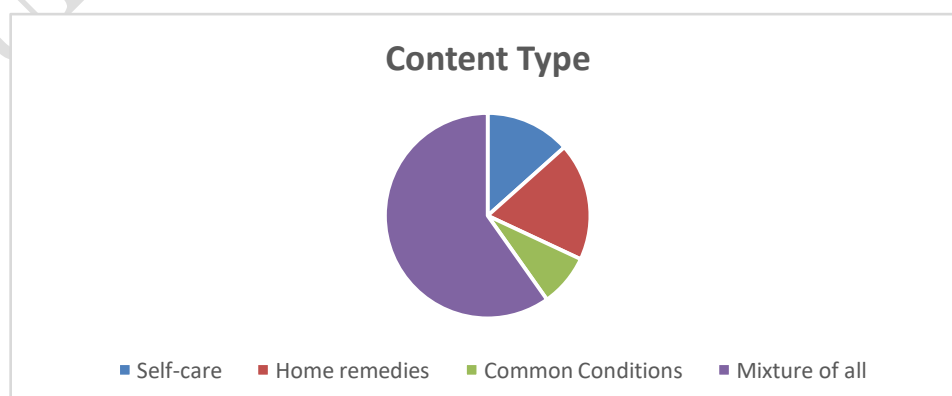
- Location: The majority of respondents were from Punjab, with some from Haryana, Chandigarh, and Himachal Pradesh.
- Age Range: Respondents ranged from 18 to 61 years, with a significant proportion in the 25–45 age group.

4.2 Key Findings

Platform Usage:

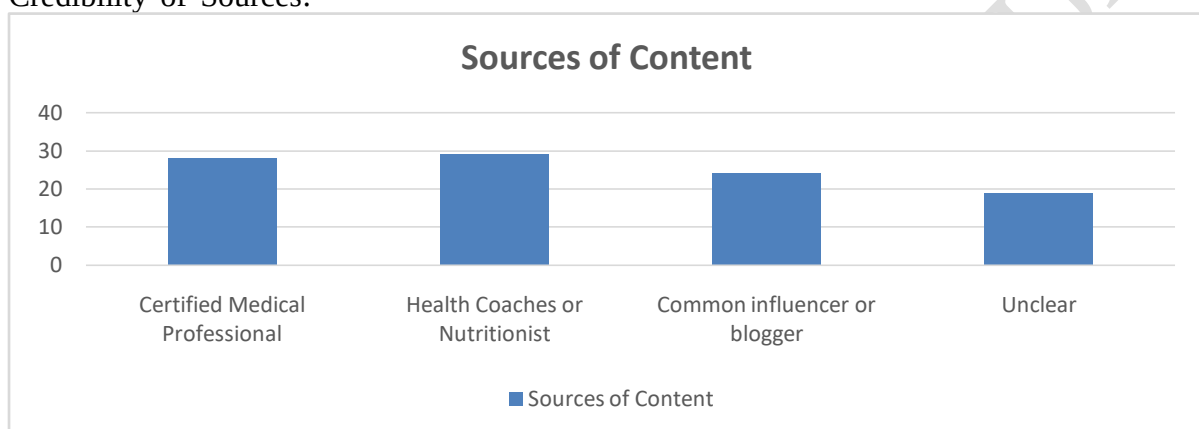
- 91% of respondents used Instagram, YouTube, or other social media platforms for health-related content.
- A smaller percentage mentioned not watching any health-related content on social media in the last 30 days.

Types of Content Consumed:



- 13% of users watched self-care tips.
- 18% consumed videos on home remedies.
- 8% explored treatments for common conditions.
- 58% responded with watching a mix of all above.

Credibility of Sources:



- Only 28% of respondents reported content from certified medical professionals and 29% from health coaches or nutritionist.
- 24% relied on influencers or bloggers, while 19% were unsure of the source.

Behavioral Impact:

- 67% of respondents admitted to trying a treatment or remedy from social media without any medical advice.
- Those who tried any social media advised treatment, 15% found the treatment very effective, 37% found the methods somewhat effective, while 6% reported it not effective.
- On the ill effects front, 39% said that after trying they found it fine, 7% experienced minor ill effects, and 3% noted significant adverse effects.

- When asked about that if any doctor would recommend the same method shared in the video, 23% said yes, 29% said no, while 48% said that a doctor may suggest the same method described in the social media video.

Challenges in Authenticity:

- Only 41% of users said that they can differentiate between authentic and unauthentic advice. On the contrary, 15% admitted to find it difficult to differentiate between authentic and unauthentic medical advice, while 44% respondents were unsure of identification.

5. Discussion

The findings underscore the widespread influence of social media on health behaviors. While social media platforms like Instagram and YouTube serve as accessible sources of health information, the reliance on non-expert sources poses threats explained here as “Misinformation may have additional consequences that—although difficult to observe—are equally insidious. For example, misinformation could create the impression that no consensus exists on a topic or that official sources of information are not credible, which could generate feelings of apathy, confusion, and mistrust. This could then lead individuals to disengage from health information seeking, avoid health care, or make decisions that are detrimental to their health.” (Chou et al., 2020)

The lack of judgment in identifying authentic advice highlights the need for public education and digital literacy programs. This calls for the identification of the population that is exposed to this misinformation and is explained here as, “Once we identify who is most vulnerable, methods for strategically intervening with these groups will be needed. For example, interventions could use sources of information that are deemed credible by a particular

vulnerable community to increase the likelihood of message acceptance.” (Chou et al., 2020)

Furthermore, the significant number of respondents attempting remedies based on social media content raises concerns about the potential for harm due to misinformation. This could prove to be fatal in the scenario of patients trying these viral remedies, already having some underlying issues that may react adversely to these methods.

5.1 Implications for Public Health

- Regulation: Social media platforms should implement stricter guidelines to verify health-related content and 82% respondents have favored for stricter regulations for health-related content on social media.
- Social media platforms could also proactively monitor, flag, and remove content or accounts that promote harmful health information and reconfigure platform features that amplify misinformation. (Vanderpool et al., 2020).
- Strategic partnerships should be formed with social media and technology platforms and stakeholders, along with other relevant stakeholders such as those in academia and civil society. (Epidemic and Pandemic Preparedness and Prevention (EPP), 2020)
- Public Awareness: Educational campaigns are necessary to encourage users to consult certified professionals.
- Engagement: Healthcare professionals and health regulators should leverage social media to share accurate and evidence-based information.

6. Study Limitations

- Sample Size: The study included only 101 respondents, which may limit the generalizability of findings to the larger population.

- Self-Reported Data: The survey relied on self-reported behaviors, which could introduce bias.
- Geographical Focus: Most respondents were from Punjab and nearby regions, limiting insights into other cultural and geographical contexts.
- Limited Longitudinal Analysis: The study focused on a snapshot of behaviors and perceptions rather than long-term trends.

7. Conclusion

This study reveals the widespread consumption of health-related content on social media and its impact on public behavior. While such content can be beneficial, the prevalence of misinformation underscores the need for regulatory measures and greater public awareness. “An approach centered on simply providing evidence-based health messages or broadly debunking misinformation will likely be insufficient. Interdisciplinary research is needed to develop additional strategies and identify the optimal timing, manner, and forum for responding to misinformation.” (Chou et al., 2020)

8. References

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