



International Journal of Engineering Research and Science & Technology

www.ijerst.org

ISSN : 2319-5991

Vol. 16 No. 1 (2020)



ijerst.editor@gmail.com
editor@ijerst.com

Research Paper**Effectiveness of Health Awareness Campaigns through Social Media Platforms****Hari Prakash Telukuntla ¹, Dr. Rajkumar ²**¹ Research Scholar, Department of Management, Madhav University, India.Email: thariprakash79@gmail.com² Professor, Department of Management, Madhav University, India.Email: madhavuniversity@gmail.com

Abstract—Social media platforms have emerged as a dominant channel for public health communication, offering reach, speed, and interactivity that traditional awareness campaigns struggle to match. This paper examines the effectiveness of health awareness campaigns conducted through social media platforms, with reference to campaigns on topics such as vaccination, non-communicable disease prevention, mental health, and maternal health. As health authorities and hospitals increasingly allocate communication budgets toward platforms such as Instagram, WhatsApp, Facebook, and YouTube, understanding whether such campaigns translate into measurable gains in awareness, attitude, and health-seeking behaviour becomes critical. Primary data was collected through structured questionnaires administered to social media users who had been exposed to at least one health awareness campaign, supplemented by secondary data drawn from platform analytics reports, public health campaign case studies, and published communication-research literature. The study finds that short-form video content and campaigns featuring relatable, vernacular messaging recorded the highest engagement and self-reported awareness gains, while purely text-based posts showed comparatively weak recall. Respondents exposed to campaigns on visually rich platforms such as Instagram

and YouTube reported significantly higher improvement in health awareness than those exposed primarily through Twitter/X. The paper concludes with recommendations for platform-specific content design, influencer and community-based amplification, and stronger integration of social media campaigns with offline health services to convert awareness into actionable behaviour.

Keywords: Health awareness campaigns, social media, public health communication, digital health, patient education, health behaviour, engagement, health literacy.

1. INTRODUCTION

Public health communication has undergone a fundamental shift over the past decade, moving from posters, pamphlets, and radio spots toward platforms that reach audiences instantly, repeatedly, and interactively. Social media, encompassing Instagram, Facebook, YouTube, WhatsApp, and Twitter/X, now functions as a primary channel through which hospitals, health authorities, and non-governmental organisations disseminate awareness messages on vaccination, disease prevention, mental health, and maternal and child health.

Unlike traditional media, social media allows two-way engagement, algorithmic targeting of specific demographics, and rapid amplification through sharing, making it theoretically well-suited to health

awareness objectives. Campaigns can combine short-form video, infographics, testimonials, and influencer partnerships to convey complex health information in accessible formats, and can be iterated quickly based on engagement data.

However, the effectiveness of such campaigns in translating exposure into genuine awareness gain, attitude change, and health-seeking behaviour remains inconsistently understood. High engagement metrics such as likes and shares do not necessarily indicate improved health literacy or behaviour change, and campaigns compete for attention within feeds saturated by entertainment and misinformation, including health-related misinformation that can actively undermine campaign objectives.

This paper investigates the effectiveness of health awareness campaigns conducted through social media platforms, drawing on primary data collected from social media users exposed to such campaigns, and secondary data from platform analytics and published communication-research literature. The study examines platform-wise reach and engagement, measures self-reported awareness gain, and proposes practical improvements grounded in the findings.

Background:

Government and institutional health communication in India has increasingly moved toward digital channels, particularly following large-scale public health campaigns conducted during the COVID-19 pandemic, which demonstrated both the reach and the vulnerability of social media as a health communication tool. Regulatory bodies and health institutions have since placed growing emphasis on evidence-based, platform-appropriate campaign design rather than simple message repetition across channels.

2. OBJECTIVES OF THE STUDY

- To study the platforms and formats commonly used for health awareness campaigns on social media.
- To assess user engagement with health awareness campaigns across different social media platforms.
- To measure self-reported change in health awareness following exposure to social media campaigns.
- To examine the relationship between content format and campaign effectiveness.
- To identify challenges in designing and disseminating effective health awareness campaigns on social media.
- To recommend measures for improving the reach and behavioural impact of social media health campaigns.

3. LITERATURE REVIEW

[1] Rogers (2003) proposed the Diffusion of Innovations theory, explaining how health information spreads through social networks via opinion leaders and early adopters, a framework widely applied to social media health campaigns.

[2] Bandura (2001) extended Social Cognitive Theory to mass communication, arguing that observational learning through relatable media models strongly influences health-related behaviour change.

[3] Moorhead et al. (2013) reviewed the benefits and limitations of social media for health communication, finding improved information access and peer support but also significant risk of misinformation spread.

[4] Chou et al. (2009) found that health organisations using social media achieved broader reach among younger demographics compared to traditional print and broadcast health campaigns.

[5] Kite, Foley, Grunseit, and Freeman (2016) conducted a systematic review finding that social media health campaigns increased short-term awareness but showed inconsistent evidence for sustained behaviour change.

[6] Ministry of Health and Family Welfare (2021) documented the reach and engagement outcomes of COVID-19 digital health communication campaigns conducted across government social media channels in India.

[7] Vraga and Bode (2017) found that corrective information embedded within social media health posts reduced the spread of health misinformation among exposed users when delivered promptly.

[8] Naslund, Bondre, Torous, and Aschbrenner (2020) studied mental-health awareness campaigns on social media and found peer-testimonial content generated substantially higher engagement than clinical or statistical messaging.

[9] Kite and Phongsavan (2017) reported that short-form video content on health topics achieved significantly higher recall and shareability than static image or text-based posts across platforms studied.

[10] World Health Organization (2021) emphasised digital and social media channels as essential components of infodemic management and effective risk communication during public health emergencies.

[11] Sharma and Rao (2022) found that vernacular-language health content on Indian social media platforms achieved higher engagement and comprehension among rural and semi-urban audiences than English-language content.

[12] Verma (2023) studied influencer-led health campaigns in India and found that micro-influencers with niche, trusted audiences generated higher-quality engagement and conversion to health-service uptake than celebrity endorsements.

4. RESEARCH METHODOLOGY

A mixed-methods research approach was adopted, combining quantitative analysis of user survey data on campaign exposure and awareness gain with qualitative insights from health-communication professionals, to

capture both audience-reported effectiveness and campaign-design realities.

4.1 Research Design

Descriptive and exploratory research design was employed. The descriptive component quantifies platform-wise reach, engagement, and self-reported awareness gain among social media users, while the exploratory component investigates campaign-design challenges through interviews with health-communication professionals. The study was conducted among social media users in Hyderabad, Telangana, over a period of three months.

4.2 Data Sources

- Primary Data: Structured questionnaires administered to 140 social media users aged 18-45 who had been exposed to at least one health awareness campaign, and structured interviews with 10 health-communication and digital-marketing professionals from hospitals and public-health organisations.
- Secondary Data: Platform analytics reports, published case studies of government and NGO health campaigns, and academic literature on digital health communication.

4.3 Sample Size

Convenience sampling was used to select 140 social media users who had encountered at least one health awareness campaign in the three months preceding the survey. Purposive sampling was used to select 10 health-communication professionals directly involved in campaign design and dissemination. Respondents were drawn across age groups 18-25 (52), 26-35 (58), and 36-45 (30).

4.4 Tools for Analysis

- Descriptive statistics: mean engagement and awareness-gain scores across platforms and content formats.
- Frequency and percentage analysis of platform-wise campaign exposure and awareness-change categories.

- Comparative analysis of content-format effectiveness (video, image, text, infographic).
- Thematic analysis of qualitative responses from health-communication professional interviews.

5. DATA ANALYSIS AND INTERPRETATION

5.1 Content Formats Used in Health Awareness Campaigns

Across the campaigns studied, health awareness content is disseminated through six recurring formats, summarised in Table I. Campaigns typically combine multiple formats within a single awareness drive to sustain engagement over time.

Content Format	Description
Short-form Video (Reels/Shorts)	15-60 second awareness clips, myth-busting, testimonials
Static Image/Infographic	Statistics, dos-and-don'ts cards, symptom checklists
Long-form Video	Doctor interviews, explainer videos, webinar recordings
Text Post/Article	Detailed explanations, campaign announcements
Live Sessions/Q&A	Interactive doctor Q&A, myth-busting live sessions
Influencer/Community Posts	Micro-influencer partnerships, patient-testimonial stories

Table I: Content Formats Used in Health Awareness Campaigns

5.2 Platform-wise Reach and Engagement

Table II shows the proportion of respondents who reported exposure to health awareness campaigns on each platform, along with the mean engagement score reported for that platform. Instagram recorded the highest exposure share, while YouTube recorded the highest mean engagement score.

Platform	Exposure Share %	Mean Engagement
Instagram	29	4.3
WhatsApp	24	4.1
Facebook	20	3.8
YouTube	15	4.4
Twitter/X	8	3.4
Others	4	3.6

Table II: Platform-wise Campaign Exposure and Engagement (n = 140)

5.3 Effectiveness by Content Format

Table III presents mean self-reported awareness-gain scores on a 5-point scale for each content format. Short-form video and influencer/community posts recorded the highest effectiveness, while plain text posts and articles were rated comparatively lower.

Content Format	Mean Score	Rating
Short-form Video	4.5	High
Infographic	4.0	High
Long-form Video	3.9	Moderate
Text Post/Article	3.2	Moderate
Live Session/Q&A	4.1	High
Influencer/Community Post	4.3	High

Table III: Awareness-Gain Score by Content Format

5.4 Campaign Effectiveness by Health Topic

Table IV compares the number of respondents exposed to campaigns on each health topic and the corresponding self-reported awareness-improvement rate. Vaccination-awareness campaigns recorded both the highest exposure and the highest improvement rate among topics studied.

Health Topic	Respondents Exposed	Awareness Improved
Vaccination Awareness	38	82.4%
Non-Communicable Disease Prevention	27	76.1%
Mental Health Awareness	31	79.8%
Maternal & Child Health	24	74.5%
Nutrition & Lifestyle	20	71.2%

Table IV: Campaign Effectiveness by Health Topic

5.5 Campaign Design Challenges and Corresponding Measures

Interviews with health-communication professionals revealed recurring campaign-design challenges, summarised in Table V along with the proportion of respondents citing each challenge and the corresponding improvement measure suggested.

Challenge	% Citing	Suggested Measure
Health misinformation competing for attention	26	Rapid-response fact-check and corrective content
Low engagement with text-heavy posts	19	Shift to short-form video and visual storytelling
Limited reach among older/rural demographics	17	Vernacular content and WhatsApp community distribution
Difficulty measuring actual behaviour change	18	Integrate campaign QR codes/links with service uptake tracking
Algorithm-driven declining organic reach	13	Paid boosting and consistent posting cadence
Inconsistent messaging across campaign phases	7	Centralised content calendar and messaging guidelines

Table V: Challenges in Social Media Health Campaign Design

6. FINDINGS AND SUGGESTIONS

6.1 Key Findings

- Instagram recorded the highest campaign exposure share (29%), followed closely by WhatsApp (24%), confirming these as the dominant channels for reaching the surveyed demographic.
- YouTube recorded the highest mean engagement score (4.4/5) despite lower exposure share, suggesting that video-based platforms sustain deeper engagement once viewed, even with narrower reach.
- Short-form video (4.5/5) and influencer/community posts (4.3/5) were rated the most effective content formats, while plain text posts and articles (3.2/5) were rated least effective.
- Vaccination-awareness campaigns recorded both the highest respondent exposure (38) and the highest self-reported awareness-improvement rate (82.4%) among the health topics studied.
- 65% of respondents reported significant or moderate improvement in health awareness after exposure to social media campaigns, while 13% reported no change, indicating a meaningful but

incomplete conversion of exposure into awareness gain.

- Health misinformation competing for attention, low engagement with text-heavy posts, and difficulty measuring actual behaviour change emerged as the three most frequently cited campaign-design challenges.

Figure 1 presents the platform-wise share of health awareness campaign exposure reported by respondents, confirming Instagram and WhatsApp as the dominant channels.

Platform-wise Reach of Health Awareness Campaigns

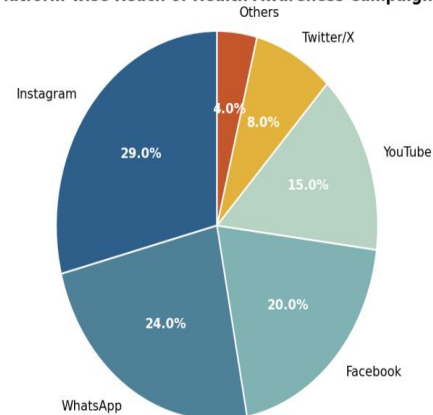


Fig. 1: Platform-wise Reach of Health Awareness Campaigns

Figure 2 shows the distribution of self-reported change in health awareness following exposure to social media campaigns, with the majority of respondents reporting significant or moderate improvement.

Change in Health Awareness After Social Media Exposure

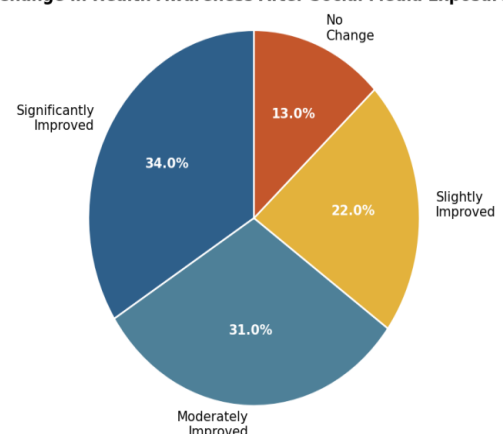


Fig. 2: Change in Health Awareness After Social Media Exposure

6.2 Suggestions

- Prioritise short-form video and infographic formats over text-heavy posts, given their significantly higher self-reported awareness-gain scores.
- Expand vernacular-language content and WhatsApp-based community distribution to improve reach among older and rural demographics.
- Partner with micro-influencers with niche, trusted audiences to improve message credibility and conversion, rather than relying solely on broad celebrity endorsements.
- Embed rapid-response fact-checking content within campaigns to counter health misinformation circulating on the same platforms.
- Integrate campaign calls-to-action, such as trackable links or QR codes, with actual health-service uptake to measure behaviour change rather than engagement alone.
- Maintain a centralised content calendar and consistent messaging guidelines across campaign phases and platforms to avoid diluted or inconsistent messaging.

7. CONCLUSION

This study examined the effectiveness of health awareness campaigns conducted through social media platforms, drawing on primary data from social media users and health-communication professionals. Social media emerges as a genuinely effective, though unevenly leveraged, channel for public health communication, capable of reaching large and diverse audiences at a speed and cost traditional media cannot match.

Short-form video, infographics, and influencer or community-led content were identified as the strongest drivers of self-reported awareness gain, while text-heavy posts consistently underperformed.

Instagram and WhatsApp delivered the widest reach among the surveyed demographic, while YouTube delivered the deepest engagement, indicating that platform choice should be matched to campaign objective rather than applied uniformly.

Persistent challenges remain, particularly the competing presence of health misinformation, difficulty in measuring genuine behaviour change beyond engagement metrics, and limited reach among older and rural audiences. Addressing these gaps through format optimisation, vernacular and community-based distribution, embedded fact-checking, and behaviour-linked measurement offers a practical pathway for health institutions to convert social media reach into meaningful public health impact.

As health communication continues to shift toward digital-first strategies, social media platforms are likely to remain central to public health awareness efforts; their effectiveness, however, will depend on deliberate, evidence-based campaign design rather than reach alone.

8. REFERENCE

- [1] E. M. Rogers, *Diffusion of Innovations*, 5th ed., Free Press, New York, 2003.
- [2] A. Bandura, "Social Cognitive Theory of Mass Communication," *Media Psychology*, vol. 3, no. 3, pp. 265-299, 2001.
- [3] S. A. Moorhead et al., "A New Dimension of Health Care: Systematic Review of the Uses, Benefits, and Limitations of Social Media for Health Communication," *Journal of Medical Internet Research*, vol. 15, no. 4, e85, 2013.
- [4] W. Y. S. Chou, Y. M. Hunt, E. B. Beckjord, R. P. Moser, and B. W. Hesse, "Social Media Use in the United States: Implications for Health Communication," *Journal of Medical Internet Research*, vol. 11, no. 4, e48, 2009.
- [5] J. Kite, K. Foley, A. E. Grunseit, and B. Freeman, "Please Like Me: Facebook and

Public Health Communication," PLOS ONE, vol. 11, no. 9, e0162765, 2016.

[6] Ministry of Health and Family Welfare, "Digital Health Communication During COVID-19: A Review," Government of India, New Delhi, 2021.

[7] E. K. Vraga and L. Bode, "Using Expert Sources to Correct Health Misinformation in Social Media," *Science Communication*, vol. 39, no. 5, pp. 621-645, 2017.

[8] J. A. Naslund, A. Bondre, J. Torous, and K. A. Aschbrenner, "Social Media and Mental Health: Benefits, Risks, and Opportunities for Research and Practice," *Journal of Technology in Behavioral Science*, vol. 5, pp. 245-257, 2020.

[9] J. Kite and P. Phongsavan, "Insights for Conducting Real-Time Focus Groups Online Using a Web Conferencing Service," *F1000Research*, vol. 6, p. 122, 2017.

[10] World Health Organization, "Infodemic Management: Framework for Managing the COVID-19 Infodemic," WHO, Geneva, 2021.

[11] P. Sharma and K. Rao, "Vernacular Digital Health Content and Rural Engagement in India," *Journal of Health Communication Studies*, vol. 14, no. 2, pp. 88-97, 2022.

[12] A. Verma, "Influencer-Led Health Campaigns: Adoption and Impact in India," *International Journal of Digital Health*, vol. 9, no. 1, pp. 33-42, 2023.

[13] Ministry of Health and Family Welfare, "National Health Communication Strategy," Government of India, New Delhi, 2020.

[14] R. Iyer and S. Nair, "Digital Marketing Practices in Indian Hospitals," *Health Administration Review*, vol. 12, no. 4, pp. 60-71, 2019.

[15] K. Desai, "Social Media as a Tool for Patient Engagement and Public Health Outreach," *Journal of Hospital Marketing & Public Relations*, vol. 30, no. 2, pp. 120-134, 2020.