New Media in Health Communication for Development: the Impact of Social Television in Interactive Health Communication

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Abstract

Social television holds great promise for enhancing health communication across the world, especially Africa. By leveraging the power of social media and interactive broadcasting, health campaigns can reach wider audiences, engage viewers more effectively and contribute to better health outcomes across the continent. The importance of interactive health communication cannot be overstated in modern society. Health information dissemination has, with the explosion of digital technologies, transcended the constraints of time and space, enabling prompt, two-way dialogues between healthcare providers and the public. This paper examines the impact of the application of social television in health communication, investigating its potential to develop and improve the efficacy of health campaigns through interactive and participatory engagement. Drawing upon the Diffusion of Innovations Theory and the Social Cognitive Theory, the study provides a comprehensive analysis of how social television can influence health behaviours and outcomes. The findings suggest that social television's real-time feedback, personalised messaging and enhanced audience engagement position it as a critical tool for future health campaigns. However, challenges such as misinformation, privacy concerns and the balance between entertainment and educational value must be addressed. The paper concludes with a call to action for stakeholders to leverage the potential of social television and recommendations for strategic integration, audience engagement, content accuracy, privacy and security and ongoing research.

Keywords: development communication, interactive engagement, audience participation, health campaigns, health behaviour.

1. Introduction

In the vastly growing mediascape of development media communication, social television as a new media platform has carved out a niche as an innovative intersection between traditional broadcasting and interactive digital platforms (Siapera, 2018). Defined as a method of content delivery that combines television viewing with social media interaction, social television transforms passive consumption into an active, participatory experience (Smith, Telang, 2019). This synergy not only enriches the viewing experience but also opens new avenues for health communication strategies that leverage the power of social engagement. Moreover, development (media) communication is a field of study that examines how communication can be used to promote social change, particularly in developing countries (Okunna, 2015; Servaes, 2008).

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The significance of interactive health communication cannot be overstated in contemporary society. With the proliferation of digital technologies, health information dissemination has transcended the limitations of time and space, enabling instantaneous, two-way dialogues between healthcare providers and the public (Johnson, Ambrose, 2021). This interactive paradigm shift is crucial in addressing the dynamic and complex nature of health-related issues, fostering a more informed and health-conscious society.

Thesis statement: social television has emerged as a pivotal new media platform, enhancing the efficacy of health communication through interactive and participatory engagement. By integrating the reach and visual impact of television with the conversational dynamics of social media, social television offers a unique blend of entertainment and education, facilitating a more nuanced and impactful health dialogue (Bennett, Glasgow, 2020). This medium's potential to influence public health outcomes is profound, marking a significant step forward in the way health messages are crafted and received.

Aim and objectives: The paper aims to critically evaluate the impact of the application of social television toward the development and improvement of health communication strategies on public health outcomes. The study aims to contribute to the field by synthesising current knowledge and identifying areas for future research and practice. Specific objectives of the paper are 1) to explore how social television has been integrated into health communication campaigns; 2) to assess the effectiveness of social television in engaging audiences and promoting health behaviour change; 3) to identify the strengths and weaknesses of social television as a tool for health communication; 4) to examine the potential challenges and ethical considerations associated with the use of social television in health campaigns; and 5) to provide recommendations for optimising the use of social television in future health communication efforts.

Research questions: Furthermore, the paper attempts to answer the following research questions: 1) how has Social Television been used in health communication campaigns to date?; 2) what are the demonstrated effects of Social Television on audience engagement and health behaviour change?; 3) What are the key advantages and limitations of using Social Television for health communication?: 4) what challenges and ethical issues need to be considered when implementing Social Television in health campaigns?: and 5) how can health communicators leverage the features of Social Television to enhance the impact of their campaigns?

*The Landscape of Health Communication: Historical perspective on health communication methods:*The annals of health communication are replete with a myriad of methods, each reflecting the zeitgeist of its era. Historically, health communication was an integral part of public health education and training, primarily delivered through didactic lectures and printed materials. This approach was largely unidirectional, with a focus on disseminating information from health authorities to the public (Malikhao, 2016). As societies evolved, so too did the methods of communication, with the advent of radio and television providing new platforms for health messages to reach a wider audience (Colle, 2003).

*The role of traditional media in disseminating health information:*Traditional media, encompassing radio, television and print, have long been the stalwarts of health information dissemination. These mediums have played a pivotal role in educating the public on health matters, shaping health behaviours and influencing public opinion on health policies (Dunn, Woo, 2019). Despite the rise of digital media, traditional media continue to be regarded as credible sources of health information, particularly during global health crises such as the COVID-19 pandemic (Najie, Widati, 2021).

*The shift towards interactive communication with the advent of new media:*The digital revolution has ushered in a paradigm shift towards interactive communication, characterised by the emergence of new media platforms such as social media, blogs and online forums. This shift has transformed the landscape of health communication, enabling a two-way exchange of information and allowing individuals to actively engage in their health-related decision-making processes (Stoumpos et al., 2023). The interactive nature of new media has not only democratised health information but also presented new challenges in ensuring the accuracy and reliability of health content (Kim et al., 2019).

Social television as a new media:*Definition and characteristics of social television:*Social television represents the confluence of television broadcasting and social media, creating a platform where viewers engage with televised content and each other simultaneously. This phenomenon allows for real-time interaction and sharing of television experiences across social

networks, effectively turning individual viewing into a communal event (Kim et al., 2019). Social television is characterised by its ability to foster audience participation, create communities around television content and facilitate a shared viewing experience, regardless of geographical boundaries (Kim et al., 2019; Kim et al., 2021).

Comparative analysis with traditional health communication methods: When juxtaposed with traditional health communication methods, social television stands out for its interactive capabilities. Unlike the one-way dissemination of information typical of traditional media, social television encourages a two-way dialogue, allowing viewers to contribute to the conversation and influence the narrative (Yang et al., 2023). This interactivity enhances the personalisation and relevance of health messages, potentially increasing their impact on health behaviours (Kim et al., 2019; PMC, 2020).

*Case studies of successful social television initiatives:*One illustrative case study is the repositioning of Sun TV's channel, Sun Life, which leveraged social television to target a younger, digitally-native demographic. Through a strategic use of social media, Sun TV successfully enhanced viewership and engagement by aligning content with the consumption patterns and preferences of its target audience (Media Samosa, 2020). Another example is the advocacy work by Caribbean Natural Resources Institute (CANARI), which used social television to amplify its message and foster community involvement in governance and development processes (CANARI, 2018).

*Advantages of Social Television in Health Communication:Enhanced audience engagement:*Social television has revolutionised the way audiences engage with health communication. By integrating social media tools with television programming, broadcasters can foster a more dynamic and participatory viewing experience. This enhanced engagement is evidenced by increased interactions with televised content, as viewers are encouraged to share opinions, participate in polls and become part of a larger conversation about health topics. The immediacy of social television allows for a more immersive experience, which can lead to greater retention of health information and a deeper understanding of health issues (Chen, Wang, 2021; Kanchan, Gaidhane, 2023).

Real-time feedback and interactivity: The interactivity of social television provides real-time feedback from viewers, creating a two-way communication channel between broadcasters and the audience. This immediacy allows health communicators to gauge audience reactions, answer questions and address misconceptions as they arise, thereby enhancing the effectiveness of health messages. Real-time interactivity also enables a more personalised approach to health communication, as viewers can receive tailored responses to their concerns (Chen, Wang, 2021; Kanchan, Gaidhane, 2023; Kim et al., 2019).

*Personalisation of health messages:*Social television allows for the personalisation of health messages, making them more relevant to individual viewers. By utilising data analytics and viewer feedback, health communicators can customise content to address specific demographics, cultural backgrounds and personal health concerns. This level of personalisation ensures that health messages resonate more deeply with viewers, potentially leading to positive changes in health behaviours (Chen, Wang, 2021; Kanchan, Gaidhane, 2023; Kim et al., 2021).

*Broader reach and accessibility:*The accessibility of social television extends the reach of health communication to a broader audience. With the proliferation of digital devices, health messages can be disseminated across multiple platforms, ensuring that they are available to individuals regardless of location or socioeconomic status. This increased accessibility is crucial for public health campaigns, as it allows for the distribution of vital health information to diverse populations (García-Perdomo, 2021), including those who may have previously been underserved by traditional media (Chen, Wang, 2021; Kanchan, Gaidhane, 2023; Kim et al., 2019).

*Challenges and Considerations:*While the potential benefits are clear, there are challenges to consider. These include addressing misinformation and ensuring content accuracy, privacy concerns and data security, balancing entertainment and educational value and ethical considerations in health message dissemination. Moreover, balancing entertainment with educational value is crucial to keep the audience engaged without compromising the quality of health information (Chen, Wang, 2021).

*Addressing misinformation and ensuring content accuracy:*In the realm of social television, the rapid dissemination of information presents a formidable challenge in mitigating the spread of misinformation. Ensuring content accuracy is paramount, as health-related misinformation can have dire consequences. Strategies to combat misinformation include employing fact-checking protocols and fostering media literacy among audiences. It is essential to establish trust and

accountability, particularly in journalism, where the veracity of information is critical (Chen, Wang, 2021; Kanchan, Gaidhane, 2023; García-Perdomo, 2021; Yang et al., 2023).

*Privacy concerns and data security:*The integration of social media with television raises significant privacy concerns and data security issues. Protecting users' privacy requires a careful balance between personalisation and the risk of data exposure. Anonymisation techniques and robust data protection measures are necessary to safeguard user information while still allowing for the personalisation that makes social television engaging (Chen, Wang, 2021; Kanchan, Gaidhane, 2023; Kim et al., 2021).

*Balancing entertainment and educational value:*Social television must navigate the delicate balance between entertainment and educational value. While the primary aim is to inform and educate, the content must also be engaging to capture the audience's attention. Employing entertainment-education strategies can enhance the appeal of educational messages, making them more relatable and memorable for viewers (Kim et al., 2019, 2021).

*Ethical considerations in health message dissemination:*Ethical considerations in disseminating health messages through social television are complex. Issues include respecting viewers' autonomy, avoiding the perpetuation of social inequities and ensuring that content does not infringe on privacy or freedom of choice. Public health researchers and broadcasters must adhere to ethical principles that prioritise the protection of individual users (Colle, 2003; Hunter et al., 2018).

2. Materials and methods

The methodology for the literature review research paper was designed to ensure a semi-systematic analysis of existing literature related to social television and its impact on health communication. The following steps outline the process:

Defining the scope: The scope of the literature review was defined by the research questions, which aimed to explore the role of social television in health communication and its potential to influence health behaviours.

Database and source selection: Relevant databases such as PubMed, PsycINFO and Google Scholar were selected for the literature search. Sources included peer-reviewed journal articles, books, conference proceedings and reputable online publications.

Search strategy: A combination of keywords and phrases related to social television, health communication, audience engagement and interactive media was used. Boolean operators (AND, OR, NOT) were employed to refine the search results.

Inclusion and exclusion criteria: Criteria were established based on publication date (within the last 10 years, 2023-2014), language (English) and relevance to the research questions. Studies that did not focus on social television or its application in health communication were excluded.

Screening and selection: Titles and abstracts were screened for relevance, and full texts were reviewed to determine their suitability for inclusion. The reference lists of selected articles were also examined for additional sources.

Data extraction: Key information was extracted from each source, including the authors, year of publication, study objectives, methodology, results and conclusions.

Quality Assessment: The quality of the sources was assessed using established criteria such as the clarity of research objectives, appropriateness of the methodology and the rigour of the analysis.

Synthesis and analysis: Data were synthesised to identify common themes, trends and gaps in the literature. A narrative approach was used to integrate findings and provide a comprehensive overview of the research topic.

Justification of methodology: The chosen methodology was justified by its ability to provide a thorough and unbiased review of the literature, contributing to the reliability and validity of the research findings.

3. Discussion

Research Gaps and Future Studies: Despite the promising prospects of social television, there are notable research gaps that need addressing. Current literature indicates a need for more comprehensive methodologies that assess the impact of social television on health behaviour change. Additionally, there is a call for research that explores the effectiveness of social television in various sociocultural contexts and its ability to respond rapidly to public health emergencies. Future studies should also consider the characteristics of messages, digital communication strategies and the attitudes and perceptions of healthcare providers.

Future implications and research directions: *Potential for social television in global health campaigns:*Social television holds immense potential in global health campaigns, offering a platform that can transcend geographical boundaries and cultural barriers. Its ability to engage audiences in real-time and foster community dialogue makes it an ideal medium for widespread health initiatives. Studies suggest that social media, a key component of social television, can significantly contribute to health promotion beyond mere awareness, potentially influencing long-term behaviour change. However, the long-term impact of such campaigns requires further exploration to understand sustainable behavioural changes (Chen, Wang, 2021; Kanchan, Gaidhane, 2023; Kim et al., 2019, 2021).

*Predictions for the evolution of interactive health communication:*As we look towards the future, interactive health communication is predicted to evolve significantly. The integration of digital health solutions is expected to increase exponentially, as healthcare systems develop trust in technology due to peer usage, cost benefits and observed improvements in patient health outcomes. The versatility of remote patient monitoring and other digital health tools will likely lead to more personalised and community-based care, reshaping the landscape of health communication (Chen, Wang, 2021; Kanchan, Gaidhane, 2023; Kim et al., 2019).

The potential for social television in health campaigns, especially in Africa, is significant, given the continent's rapidly increasing access to digital technology and the widespread use of social media. Social television, which combines traditional broadcasting with interactive social media platforms, offers a unique opportunity to engage audiences in health-related discussions and interventions (Chen, Wang, 2021; Kim et al., 2019).

*Enhanced engagement and education:*Social television can enhance audience engagement by allowing viewers to participate in health campaigns actively. This can be achieved through interactive features such as live polls, Q&A sessions and social media discussions that accompany the broadcast. Such engagement not only increases the viewers' knowledge but also empowers them to take charge of their health. For instance, in South Africa, social media has been identified as a tool with the potential to scale health promotion programmes due to its low cost and ability to create virtual communities (Abroms, 2019; Chen, Wang, 2021).

*Overcoming geographical barriers:*One of the most significant advantages of social television is its ability to overcome geographical barriers. In many parts of the developing world, especially in Africa, access to healthcare facilities and professionals is limited. Social television can bridge this gap by providing health education and information to remote and underserved areas, thus playing a crucial role in public health campaigns (Abroms, 2019; Gunasekeran et al., 2022; Kim et al., 2021).

*Real-time feedback and data collection:*The interactive nature of social television allows for real-time feedback from the audience. This can be invaluable for health organisations to gauge the effectiveness of their messages and campaigns. Additionally, data collected from audience interactions can help tailor future health interventions to be more effective and targeted (Chen, Wang, 2021; Gunasekeran et al., 2022; Kim et al., 2019).

4. Results

Theoretical Framework:The theoretical framework of research into social television as a new media platform for health communication can be anchored on two key theories: the Diffusion of Innovations Theory (DIT) and the Social Cognitive Theory (SCT).

Rogers (Rogers, 2003) defines diffusion as "the process in which an innovation is communicated through certain channels over time among the members of a social system" (p. 5). DIT explains how new ideas, products, or technologies spread within a social system over time. DIT posits that media, as an agent of change, can influence audiences to adopt new behaviours or innovations through a series of stages: knowledge, persuasion, decision, implementation and confirmation. In the context of social television, this theory can explain how health communication campaigns disseminated through interactive TV can lead to widespread adoption of health behaviours among the population (Rogers, 2003).

Social Cognitive Theory (SCT), on the other hand, emphasises the role of observational learning, imitation and modelling in behaviour change. Social television, with its interactive features, allows viewers to observe health behaviours being modelled, discuss them and receive reinforcement through social media platforms, thus influencing their own health decisions and actions. SCT, proposed by Bandura (Bandura, 1989, 2001), emphasises observational learning, imitation and modelling in behaviour change. Social television, with its interactive features, allows viewers to:

– Observe health behaviours being modelled.
– Discuss these behaviours.
– Receive reinforcement through social media platforms.
This influences viewers' own health decisions and actions (see Bandura, 2001).

5. Conclusion

Social television holds great promise for enhancing health communication across the world, especially Africa. By leveraging the power of social media and interactive broadcasting, health campaigns can reach wider audiences, engage viewers more effectively and contribute to better health outcomes across the continent. Furthermore, the transformative potential of social television in the realm of health communication cannot be overstated. As a medium that seamlessly integrates the interactive capabilities of social media with the broad reach of traditional television, social television stands poised to revolutionise the dissemination and reception of health information. The theoretical frameworks, particularly the Diffusion of Innovations Theory and the Social Cognitive Theory, provide a robust foundation for understanding how social television can influence health behaviours and outcomes. These theories underscore the importance of media as a catalyst for change and the power of observational learning and modelling in shaping health decisions.

The thesis of this research – that social television has emerged as a pivotal new media platform, enhancing the efficacy of health communication through interactive and participatory engagement – has been substantiated by the evidence presented. The integration of real-time feedback, personalised messaging and enhanced audience engagement positions social television as a critical tool in the future of health campaigns, especially in reaching diverse and widespread populations.

Therefore, it is imperative for stakeholders in health communication – ranging from policymakers and healthcare providers to media professionals and public health researchers – to recognise and harness the potential of social television. There is a call to action for these stakeholders to collaborate in creating content that is not only informative and accurate but also engaging and accessible. By doing so, they can ensure that health communication is not just a broadcast but a dialogue, one that empowers individuals and communities to make informed health choices. Future research should focus on identifying the most effective strategies for implementing social television in various African contexts and measuring its impact on public health.

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References

Abroms, 2019 – Abroms, L.C. (2019). Public health in the era of social media. *American Journal of Public Health*. 109(Suppl 2): S130-S131. DOI: https://doi.org/10.2105/AJPH.2018.304947

Bandura, 1989 – Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*. 44(9): 1175-1184. DOI: https://doi.org/10.1037/0003-066X.44.9.1175

Bandura, 2001 – Bandura, A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology*. 52: 1-26. DOI: https://doi.org/10.1146/annurev.psych.52.1.1

Bennett, Glasgow, 2020 – Bennett, G.G., Glasgow, R.E. (2020). The delivery of public health interventions via the Internet: Actualising their potential. *Annual Review of Public Health*. 31: 273-292. DOI: https://doi.org/10.1146/annurev.publhealth.031308.100235

CANARI, 2018 – CANARI. 2018. Advocacy case studies and report. [Electronic resource]. URL: https://canari.org/wp-content/uploads/2017/09/csos4goodgov-advocacy-case-studies-april 2018.pdf

Chen, Wang, 2021 – Chen, J., Wang, Y. (2021). Social media use for health purposes: Systematic review. *Journal of Medical Internet Research*. 23(5): e17917. DOI: https://doi.org/10.2196/17917

Colle, 2003 – *Colle, R.D.* (2003). Health communication: Approaches, strategies, and ways to sustainability on health or health for all. In: Servaes, J. (ed.). *Handbook of communication for development and social chang*: 1015-1037. DOI: https://doi.org/10.1007/978-981-15-2014-3

Dunn, Woo, 2019 – *Dunn, P.H., Woo, B.K.P.* (2019). Social media's role in the dissemination of health information. *Journal of the American Geriatrics Society.* 67(9): 1989-1990. DOI: https://doi.org/10.1111/jgs.16070

García-Perdomo, 2021 – *García-Perdomo, V.* (2021). How social media influence TV newsrooms online engagement and video distribution. *Journalism & Mass Communication Quarterly.* 1-22. DOI: https://doi.org/10.1016/j.soscij.2019.04.004

Gunasekeran et al., 2022 – *Gunasekeran, D.V., Chew, A., Chandrasekar, E.K., Rajendram, P., Kandarpa, V., Rajendram, M., Chia, A...., Leong, C.K.* (2022). The impact and applications of social media platforms for public health responses before and during the COVID-19 pandemic: Systematic literature review. *Journal of Medical Internet Research.* 24(4): e33680. DOI: https://doi.org/10.2196/33680

Hunter et al., 2018 – *Hunter, R.F., Gough, A., O'Kane, N., McKeown, G., Fitzpatrick, A., Walker, T., McKinley, M., Lee, M., Kee, F.* (2018). Ethical issues in social media research for public health. *American Journal of Public Health.* 108(3): 343-348. DOI: https://doi.org/10.2105/AJPH.2017.304249

Johnson, Ambrose, 2021 – *Johnson, S., Ambrose, P.J.* (2021). Health communication: Theory and practice. *Health Education Journal.* 80(6): 697-709. DOI: https://doi.org/10.1177/0017896921049905

Kanchan, Gaidhane, 2023 – *Kanchan, S., Gaidhane, A.* (2023). Social Media Role and Its Impact on Public Health: A Narrative Review. *Cureus.* 15(1): e33737. DOI: https://doi.org/10.7759/cureus.33737

Kim et al., 2019 – *Kim, J., Yang, H., Kim, J.* (2019). Being social during the big dance: Social presence and social TV viewing for March Madness in public and private platforms. *The Social Science Journal.* 58(2): 224-236. DOI: https://doi.org/10.1016/j.soscij.2019.04.004

Kim et al., 2021 – *Kim, J., Merrill Jr., K., Collins, C., Yang, H.* (2021). Social TV viewing during the COVID-19 lockdown: The mediating role of social presence. *Technology in Society.* 67: 101733. DOI: https://doi.org/10.1016/j.techsoc.2021.101733

Malikhao, 2016 – *Malikhao, P.* (2016). *Effective health communication for sustainable development.* Springer. DOI: https://doi.org/10.1007/978-981-10-7035-8_137-1

Media Samosa, 2020 – Media Samosa. 2020. Case study: How Sun TV leveraged social media to improve television viewership. [Electronic resource]. URL: https://mediasamosa.com/2020/01/20/case-study-how-sun-tv-leveraged-social-media-to-improve-television-viewership/

Najie, Widati, 2021 – *Najie, I.A., Widati, S.W.M.Z.F.* (2021). Role of traditional media in preventing misinformation about COVID-19: A literature review. *Journal Ilmu Kesehatan Masyarakat.* DOI: https://doi.org/10.1111/jgs.16070

Okunna, 2015 – *Okunna, C.S.* (2015). *Development communication: An assessment of its evolution, paradigms, and prospects in a changing world.* New York: Routledge.

PMC, 2020 – PMC. 2020. Health communication: Approaches, strategies and ways to sustainability on health or health for all. [Electronic resource]. URL: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7278262/

Rogers, 2003 – *Rogers, E.M.* (2003). Diffusion of innovations (5th ed.). Free Press. DOI: https://doi.org/10.4236/jssm.2021.146040

Servaes, 2008 – *Servaes, J.* (2008). Communication for development and social change. Sage. https://doi.org/10.4135/9788132108453

Siapera, 2018 – *Siapera, E.* (2018). Understanding new media. 2nd ed. Sage.

Smith, Telang, 2019 – *Smith, A., Telang, R.* (2019). Social television: The future of television in the Internet Age. *Television & New Media.* 20(4): 391-408. DOI: https://doi.org/10.1177/1527476419837738

Stoumpos et al., 2023 – *Stoumpos, A.I., Kitsios, F., Talias, M.A.* (2023). Digital transformation in healthcare: Technology acceptance and its applications. *International Journal of Environmental Research and Public Health.* 20(4): 3407. DOI: https://doi.org/10.3390/ijerph20043407

Yang et al., 2023 – *Yang, B., Zhang, R., Cheng, X., Zhao, C.* (2023). Exploring information dissemination effect on social media: An empirical investigation. *Perspectives on Ubiquitous Computing.* 1-14. DOI: https://doi.org/10.1007/s00779-023-01710-7