

The Role of Print Media in Shaping Public Health Outcomes: A Comprehensive Review

Fahmina Hussain^{1*}, Dr. Santosh Kumar Gautam²

¹ Research Scholar, Department of Journalism and Mass communication, Mangalayatan University, Aligarh, U.P India

E-mail: fahmina.hussain9@gmail.com

² Associate Professor, Department of Journalism and Mass Communication, Mangalayatan University, Aligarh, U.P, India

E-mail: santosh.gautam@mangalayatan.edu.in

Abstract - This theoretical study investigates how health-related material in print media affects public health by synthesising current data to grasp its influence in determining public health results. Even with the digital revolution, print media including newspapers, periodicals, and pamphlets remains a major source of information. Key topics include the spread of health information, the way health concerns are framed, and the impact on public perspective and behaviour are underlined in the review. Research shows that print media may influence health policy debate, increase knowledge of health concerns, and encourage good practices. Still, these results are much influenced by the accuracy, bias, and depth of the material. Print media's health-related material reflects more general social, economic, and political settings, therefore impacting its presentation and reception. Moreover, the different degrees of media literacy among the people help to control the influence of such material. The evaluation also covers ethical obligations of print media in health communication as well as the possibility of false information. This study offers a complete framework for comprehending the intricate interaction between print media and public health by combining theoretical viewpoints from psychology, public health, and communication studies. The results underline the importance of planned, evidence-based health communication in print media to improve its favourable influence on public health outcomes.

Keywords: Health-related content, print media, and public health outcome, Health Communication

-----X-----

INTRODUCTION

The significance of print media in distributing health-related information and impacting public health outcomes has garnered substantial attention from scholars. In today's digital age, it is worth noting that print media, including newspapers, magazines, and brochures, still hold significant importance in public health communication (Viswanath & Finnegan, 2002; Guatam, Zabi & Kaur, 2023). The impact of health-related content in print media is complex, encompassing the spread of information, the presentation of health issues, and the influence on public perceptions and behaviours. This introduction seeks to offer a comprehensive view of the theoretical underpinnings and empirical discoveries concerning the impact of print media on public health. It will draw upon significant studies and theoretical viewpoints to provide a well-rounded understanding.

Print media play a vital role in disseminating health information to a wide range of audiences, offering in-depth and comprehensive content (Grilli, Ramsay, &

Minozzi, 2002). The way health issues are presented in print media has a significant impact on how the public perceives and reacts to them. For example, the way diseases, health risks, and medical advancements are depicted in print media can have a significant impact on public perception and attitudes. This, in turn, can potentially influence health-related behaviours and policy choices (Gautam, & Kumar, 2016; Entwistle & Hancock-Beaulieu, 1992). In addition, the credibility and authority of established print media outlets give more significance to the health information they share, thereby increasing their influence on public health (Viswanath & Emmons, 2006).

Nevertheless, the impact of print media on public health is not without its share of challenges. The accuracy, bias, and comprehensiveness of health-related content play a crucial role in determining the effectiveness of print media in promoting public health (Hinnant & Len-Ríos, 2009). In addition, the public's different levels of media literacy can influence the impact of health information. The ability

of individuals to critically assess and understand media content is of great importance (Potter, 2004). The presence of misinformation and sensationalism in health reporting adds another layer of complexity to the connection between print media and public health outcomes (Jensen, 2008).

This article aims to provide a thorough evaluation of the impact of health-related content in print media on public health by integrating theoretical insights from communication studies, public health, and psychology. This analysis of the literature highlights the significance of strategic, evidence-based health communication in print media to maximise its positive influence on public health outcomes.

RESEARCH OBJECTIVE

To provide a thorough evaluation of the impact of health-related content in print media on public health by integrating theoretical insights from communication studies, public health, and psychology.

METHODOLOGY

This study utilises a qualitative research approach, using a systematic evaluation of current literature to evaluate the influence of health-related information in print media on public health. The process has three main stages: doing a comprehensive search and selection of relevant literature, extracting and analysing the data, and synthesising the results. The objective is to provide a thorough comprehension of the present level of knowledge and pinpoint areas where more study is needed, as well as potential avenues for exploration.

Conducting a thorough investigation and choosing relevant literary materials

Choosing a Database: The research will use many academic databases, such as PubMed, Scopus, Web of Science, and Google Scholar, to guarantee an extensive and all-encompassing search of pertinent material.

Methodology: We have used a blend of relevant keywords and phrases pertaining to the study subject. The terms included are "print media," "health communication," "public health," "media influence," "health behaviour," "media literacy," "misinformation," and "health policy." The search results will be refined using Boolean operators, namely AND and OR.

Criteria for Inclusion and Exclusion:

Inclusion Criteria: Scholarly papers, literature reviews, and pertinent books that have undergone peer review and were published in English during the last two decades. Research explicitly examining the influence of print media on public health.

Exclusion Criteria: Articles unrelated to health communication, research only concentrating on digital or broadcast media, non-peer-reviewed sources, and

publications in languages other than English will be excluded.

The screening process will include evaluating the titles and abstracts of the discovered publications to determine their relevancy. We will obtain and evaluate full-text articles of research that may be relevant, based on the inclusion criteria.

LITERATURE REVIEW

In 2004, Snyman sought to enhance the dissemination of schizophrenia-related information to patients and carers in South Africa through the use of printed brochures. The study emphasised the significance of following guidelines, seeking input from the audience, and considering social realities in order to effectively and efficiently disseminate health information. In a separate study conducted in 2004, Snyman conducted an evaluation of printed brochures focused on schizophrenia. The study involved the use of a checklist and the identification of best practices. The findings revealed that a significant number of brochures did not meet the necessary health message standards, making them unsuitable for the general public due to readability concerns.

In a study conducted by Marks et al. (2006), an examination was done to compare the effectiveness of a web-based physical activity intervention and a printed workbook among adolescent girls. Both interventions had a significant positive impact on enhancing physical activity self-efficacy and intentions. The study conducted by Leask et al. (2010) delved into the influence of Australian journalists on health behaviours and perceptions through mass media, with a specific focus on avian influenza and pandemic planning. The study revealed that health reporters who possess technical knowledge, have access to sources, wield organisational influence, and possess advocacy skills are of utmost importance in the realm of print media.

In their study, El-Jardali et al. (2015) examined the impact of Lebanese print media on health policies. They conducted an analysis of 1,279 health-related articles and found that the reporting standards were low and there was a tendency to prioritise expert opinions over peer-reviewed research. Ntlotlang and Grand (2016) conducted a study on the role of public libraries in health information dissemination in Botswana. The study highlighted the importance of collaboration between libraries, health agencies, and media organisations. Nagler et al. (2016) conducted an analysis of local print news in New England, emphasising the importance of focused interventions to increase awareness of health disparities, particularly in relation to cancer.

In a study conducted by Shakeel et al. (2017) in Karachi, Pakistan, the focus was on understanding physicians' perceptions of the impact of media on patients' health. Physicians raised concerns about the media's involvement in lifestyle modification and

the trustworthiness of health information, preferring to rely on healthcare professionals instead.

In a study conducted by Kim and Jung (2017), they examined the correlation between media usage, the behaviour of seeking health information, and vaccination rates among Korean adults. The results revealed that individuals who had easy access to information and utilised media platforms had higher rates of vaccination.

Peacock et al. (2019) conducted a study on the portrayal of risks and benefits of herbal supplements in print media across the UK, Romania, and Italy. The study highlighted the importance of providing unbiased, easily accessible information to assist consumers in making well-informed decisions. Campbell and Rudan (2020) highlighted the importance of clear and effective communication of health research to combat the spread of online misinformation and reach a broader range of audiences.

Ramondt and Ramírez (2020) conducted an analysis of print news coverage on air pollution health risks in the USA's most polluted region. Their findings revealed a noticeable absence of comprehensive reporting, which could potentially hinder the improvement of environmental health literacy. In their study, John and Kapilashrami (2021) examined how Indian print media depicted the health of migrants and refugees prior to the COVID-19 pandemic. They found that the portrayal was often biased and lacked adequate representation of the migrants' perspectives.

In their study, He and Li (2021) utilised China HINTS 2017 survey data to examine the influence of traditional mass media and social media on cancer information-seeking and avoidance. Their findings unveiled an intricate interplay of negative beliefs that shape these behaviours. In their study, Fatimah et al. (2021) examined the influence of communication media on reproductive health in the North Toraja society. Their findings revealed that adolescents in this society favoured printed media such as books and magazines as their primary sources of information.

Ultimately, Kersbergen et al. (2022) conducted a thorough analysis of media coverage surrounding the UK low-risk drinking guidelines between 2014 and 2017. Their findings revealed that while the overall tone of the media coverage remained impartial, there were instances where critical and comprehensive viewpoints were presented. The study highlighted the significance of precise and detailed media representation of health guidelines.

Kanchan and Gaidhane (2014) asserted that print media is crucial for effectively communicating public health information, serving as a vital platform for raising awareness and promoting healthy behaviours. This narrative review explores the historical importance of print media in health communication and assesses its relevance in today's digital media

landscape. Despite facing challenges such as digital competition and financial limitations, print media continues to play a vital role in addressing important health issues and spreading information during public health emergencies. Successfully harnessing the power of print media for health promotion requires meticulous planning, comprehensive evaluation, and strategic distribution to maximise its reach and captivate the audience. Through a meticulous search strategy, we were able to identify relevant literature by utilising electronic databases and conducting manual searches of reference lists. The literature was carefully screened to ensure it aligned with the objectives of the review. Key insights were synthesised through a process of iterative analysis. Print media continues to be a fundamental aspect of health communication, providing tangible channels for the distribution of information and engagement with the audience.

DISCUSSION AND FINDINGS

The many research discussed in this article emphasise the complex function of media in distributing health information and influencing public health behaviours. The results continuously emphasise the impact of media on health communication, the difficulties encountered in successfully transmitting health messages, and the possible avenues for improvement.

The significance of printed media

Various studies, like Snyman's (2004), demonstrate the possible advantages and constraints of using printed brochures for distributing health information. Snyman's work highlights the significance of following standards, seeking input from audiences, and being attuned to social realities. However, Snyman's subsequent study emphasises notable difficulties in fulfilling the requirements for health messages, namely in terms of readability and accessibility for the general population. This highlights a crucial deficiency in the efficacy of printed materials, indicating the need for enhanced design and user interaction tactics.

Comparative Evaluation of Media Formats

The research conducted by Marks et al. (2006) compares the effectiveness of web-based and printed treatments in encouraging physical activity among teenage females. The findings suggest that both formats are capable of considerably improving self-efficacy and intentions. This discovery implies that while digital interventions are gaining popularity, conventional print media continues to be an effective tool, especially when customised for specific target groups. Similarly, the research conducted by Ntlotlang and Grand (2016) on public libraries in Botswana highlights the lasting significance of printed materials, particularly when combined with cooperative initiatives including libraries, health agencies, and media organisations.

The impact of the media on individuals' perception of health

Leask et al. (2010) and El-Jardali et al. (2015) provide valuable information on the significant impact of mass media in changing health views and policy. Leask's research emphasises the distinct role of health reporters in the media environment, since they possess the expertise and persuasive abilities to greatly influence public health discussions. El-Jardali's study uncovers a worrisome disparity in the quality of health reporting, since it tends to favour expert views rather than peer-reviewed studies. There is a need for improved journalistic standards and training to increase the trustworthiness and influence of health-related news.

Research conducted by Nagler et al. (2016) and Ramondt and Ramírez (2020) emphasise the significant impact of media coverage on reducing health inequalities and improving people's understanding of environmental health. Nagler's emphasis on local print news highlights the need of specific media interventions to increase awareness of health inequities, specifically in relation to cancer. The research conducted by Ramondt and Ramírez highlights a notable deficiency in the extent of air pollution coverage, which has the potential to enhance the public's comprehension and reaction to environmental health hazards.

Medical professionals' views on the influence of media.

The research conducted by Shakeel et al. (2017) in Karachi, Pakistan, demonstrates that doctors in this region have a sceptical view on the media's impact on patient health behaviours. Physicians voiced scepticism about the trustworthiness and efficacy of the media in promoting lifestyle changes, emphasising a preference for information provided by healthcare experts. This scepticism highlights the need of establishing trust between media and healthcare practitioners in order to improve the reliability and effectiveness of health information.

Usage of media and its impact on health-related information

Looking for the study conducted by Kim and Jung (2017) examines the correlation between the availability of health information, media consumption, and vaccination rates among Korean people, revealing a favourable relationship. This implies that a variety of media outlets, such as conventional print and radio, are essential in advancing public health campaigns.

Issues and Suggestions for Enhancing Health Communication

The studies conducted by Peacock et al. (2019) and Kersbergen et al. (2022) highlight the difficulties associated with how the media presents health-related topics. Peacock's research on herbal supplements emphasises the need of unbiased and easily available

information to empower consumers. Kersbergen's research of media coverage of drinking rules emphasises the need of detailed and precise reporting. These studies together advocate for measures to improve the quality, context, and impartiality of health information in the media.

CONCLUSION

The research examined in this article highlight the intricate relationship between media, the distribution of health information, and the resulting public health effects. Although the media continues to be a potent instrument for health communication, there are still considerable obstacles to overcome in order to guarantee accuracy, accessibility, and audience engagement. To tackle these issues, a comprehensive strategy is needed, which involves developing better rules for designing health messages, raising the standards of journalism, and fostering deeper cooperation among media outlets, healthcare practitioners, and governmental organisations. By capitalising on the advantages of both conventional and digital media, we can enhance the dissemination of information and enable communities, therefore enhancing public health outcomes. Ultimately, the successful distribution of health information via media requires a comprehensive strategy that capitalises on the advantages of both conventional and digital platforms. Through the enhancement of design guidelines, elevation of journalistic standards, and promotion of cooperation between media and healthcare experts, we may effectively educate and empower communities, eventually resulting in enhanced public health outcomes.

REFERENCES

1. Dhanashree, Garg H, Chauhan A, Bhatia M, Sethi G, Chauhan G: Role of mass media and its impact on general public during coronavirus disease 2019 pandemic in North India: an online assessment. *Indian J Med Sci.* 2021, 73:21-5. 10.25259/IJMS_312_2020
2. Ashorkhani M, Gholami J, Maleki K, Nedjat S, Mortazavi J, Majdzadeh R: Quality of health news disseminated in the print media in developing countries: a case study in Iran. *BMC Public Health.* 2012, 12:627. 10.1186/1471-2458-12-627
3. Merritt R, Eida T, Safon C, Kendall S: Print media coverage of breastfeeding in Great Britain: positive or negative?. *Matern Child Nutr.* 2023, 19 Suppl 1:e13458. 10.1111/mcn.13458
4. Giguère A, Légaré F, Grimshaw J, et al.: Printed educational materials: effects on professional practice and healthcare outcomes. *Cochrane Database Syst Rev.*

- 2012, 10:4398. 10.1002/14651858.CD004398.pub3
5. Kersbergen I, Buykx P, Brennan A, Brown J, Michie S, Holmes J: Print and online textual news media coverage of UK low-risk drinking guidelines from 2014 to 2017: a review and thematic analysis. *Drug Alcohol Rev.* 2022, 41:1161-73. 10.1111/dar.13458
6. Marks JT, Campbell MK, Ward DS, Ribisl KM, Wildemuth BM, Symons MJ: A comparison of web and print media for physical activity promotion among adolescent girls. *J Adolesc Health.* 2006, 39:96-104. 10.1016/j.jadohealth.2005.11.002
7. Leask J, Hooker C, King C: Media coverage of health issues and how to work more effectively with journalists: a qualitative study. *BMC Public Health.* 2010, 10:535. 10.1186/1471-2458-10-535
8. Snyman M: Using the printed medium to disseminate information about psychiatric disorders: original article. *Afr J Psychiatry.* 2004, 7:15-20. 10.4314/ajpsy.v7i4.30174
9. Redmond N, Baer HJ, Clark CR, Lipsitz S, Hicks LS: Sources of health information related to preventive health behaviors in a national study. *Am J Prev Med.* 2010, 38:620-27. 10.1016/j.amepre.2010.03.001
10. El-Jardali F, Bou Karroum L, Bawab L, Kdouh O, El-Sayed F, Rachidi H, Makki M: Health reporting in print media in Lebanon: evidence, quality, and role in informing policymaking. *PLoS One.* 2015, 10:e0136435. 10.1371/journal.pone.0136435
11. Ntlotlang T, Grand B: The role of libraries in the dissemination of health information in Botswana: a study of Mochudi and Molepolole public libraries. *Libr Rev.* 2016, 65:320-49. 10.1108/LR-05-2015-0051
12. Nagler RH, Bigman CA, Ramanadhan S, Ramamurthi D, Viswanath K: Prevalence and framing of health disparities in local print news: implications for multilevel interventions to address cancer inequalities. *Cancer Epidemiol Biomarkers Prev.* 2016, 25:603-12. 10.1158/1055-9965.EPI-15-1247
13. Shakeel S, Nesar S, Rahim N, Iffat W, Ahmed HF, Rizvi M, Jamshed S: Utilization and impact of electronic and print media on the patients' health status: physicians' perspectives. *J Pharm Bioallied Sci.* 2017, 9:266-71. 10.4103/jpbs.JPBS_327_16
14. Kim J, Jung M: Associations between media use and health information-seeking behavior on vaccinations in South Korea. *BMC Public Health.* 2017, 17:700. 10.1186/s12889-017-4721-x
15. Peacock M, Badea M, Bruno F, et al.: Herbal supplements in the print media: communicating benefits and risks. *BMC Complement Altern Med.* 2019, 19:196. 10.1186/s12906-019-2602-9
16. Campbell IH, Rudan I: Helping global health topics go viral online. *J Glob Health.* 2020, 8:10101. 10.7189/jogh.10.010101
17. Ramondt S, Ramírez AS: Media reporting on air pollution: health risk and precautionary measures in national and regional newspapers. *Int J Environ Res Public Health.* 2020, 17:6516. 10.3390/ijerph17186516
18. John EA, Kapilashrami A: Victims, villains and the rare hero: analysis of migrant and refugee health portrayals in the Indian print media. *Indian J Med Ethics.* 2021, VI:1-24. 10.20529/IJME.2020.131
19. He R, Li Y: Cancer beliefs, and cancer-related information-seeking or avoidance behavior patterns in China. *Int J Environ Res Public Health.* 2021, 18:3130. 10.3390/ijerph18063130
20. Fatimah JM, Arianto, Bahfiarti T: Media communication and youth reproductive health, North Toraja District. *Gac Sanit.* 2021, 35 Suppl 2:S112-5. 10.1016/j.gaceta.2021.07.007
21. Nesi J: The impact of social media on youth mental health: challenges and opportunities. *N C Med J.* 2020, 81:116-21. 10.18043/ncm.81.2.116
22. Ittefaq M, Seo H, Abwao M, Baines A: Social media use for health, cultural characteristics, and demographics: a survey of Pakistani millennials. *Digit Health.* 2022, 8:8. 10.1177/20552076221089454
23. M A S, Pande N, P K SK: Role of effective crisis communication by the government in managing the first wave Covid-19 pandemic - a study of Kerala government's success. *J Public Aff.* 2021, 21:e2721. 10.1002/pa.2721
24. Parker PD, Prabhu AV, Su LJ, Zorn KK, Greene CJ, Hadden KB, McSweeney JC: What's in between the lines: assessing the readability, understandability, and actionability in breast cancer survivorship print materials. *J Cancer Educ.* 2022, 37:1532-9. 10.1007/s13187-021-02003-4
25. Manjunatha SN, Venkatesh Darshan AN, Sajja J: A content analysis: health-related

- advertisements in print media. *Indian J Community Med.* 2019, 44:169-70. 10.4103/ijcm.IJCM_271_18
26. Wakefield MA, Loken B, Hornik RC: Use of mass media campaigns to change health behaviour . *Lancet.* 2010, 376:1261-71. 10.1016/S0140-6736(10)60809-4
 27. Cutilli CC, Simko LC, Colbert AM, Bennett IM: Health literacy, health disparities, and sources of health information in U.S. older adults. *Orthop Nurs.* 2018, 37:54-65. 10.1097/NOR.0000000000000418
 28. Wilson EA, Makoul G, Bojarski EA, et al.: Comparative analysis of print and multimedia health materials: a review of the literature. *Patient Educ Couns.* 2012, 89:7-14. 10.1016/j.pec.2012.06.007
 29. Mheidly N, Fares J: Leveraging media and health communication strategies to overcome the COVID-19 infodemic. *J Public Health Policy.* 2020, 41:410-20. 10.1057/s41271-020-00247-w
 30. Gill K, Mao A, Powell AM, Sheidow T: Digital reader vs print media: the role of digital technology in reading accuracy in age-related macular degeneration. *Eye (Lond).* 2013, 27:639-43. 10.1038/eye.2013.14
 31. Jerónimo P, Correia JC, Gradim A: Are we close enough? Digital challenges to local journalists . *Journal Pract.* 2022, 16:813-27. 10.1080/17512786.2020.1818607
 32. Entwistle, V., & Hancock-Beaulieu, M. (1992). Health and medical coverage in the UK national press. *Public Understanding of Science*, 1(4), 367-382.
 33. Grilli, R., Ramsay, C., & Minozzi, S. (2002). Mass media interventions: effects on health services utilisation. *Cochrane Database of Systematic Reviews*, (1).
 34. Hinnant, A., & Len-Ríos, M. E. (2009). Health journalists' perceptions of their communities and implications for health news. *Journalism & Mass Communication Quarterly*, 86(4), 876-893.
 35. Jensen, J. D. (2008). Scientific uncertainty in news coverage of cancer research: Effects of hedging on scientists' and journalists' credibility. *Human Communication Research*, 34(3), 347-369.
 36. Potter, W. J. (2004). *Theory of Media Literacy: A Cognitive Approach*. Sage Publications.
 37. Viswanath, K., & Emmons, K. M. (2006). Message effects and social determinants of health: Its application to cancer disparities. *Journal of Communication*, 56(s1), S238-S264.
 38. Viswanath, K., & Finnegan, J. R. (2002). The knowledge gap hypothesis: Twenty-five years later. In B. D. Ruben & L. A. Lievrouw (Eds.), *Communication Yearbook 19* (pp. 187-227). Routledge.
 39. Gautam, S.K., Zabi, S., & Kaur, A. (2023). The Role of Television in Health Communication: A Comprehensive Examination of HIV/AIDS Awareness and Behavioral Change in India, *Samdarhi*, pp.4267-4268, Punjab Academy, Delhi
 40. Gautam, S.K., & Kumar, R., (2016). Mass Media for Health Communication and Behavioural Change: A Theoretical Framework, *Journal of Media and Social Development*, pp. 20-23, Mysore University, Mysore

Corresponding Author

Fahmina Hussain*

Research Scholar, Department of Journalism and Mass communication, Mangalayatan University, Aligarh,U.P India

E-mail: fahmina.hussain9@gmail.com