

Media Education through Community Radio during Covid-19: A Qualitative Study on Tribal Populations

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Received: 29-08-2024

Revised: 13-09-2024

Accepted: 30-09-2024

ABSTRACT

The radio is an effective means of communication. It has shown to be the most successful kind of media for advancing rural development and health, especially when it comes to providing timely information. The research explores how community radio served as an effective tool for delivering essential public health information to marginalized tribal communities, particularly in the context of the COVID-19 pandemic and vaccine awareness. The data collection was carried out in Noolpuzha Grama Panchayath in Wayanad District, Kerala. The in-depth interviews with 16 participants who belong to tribal communities highlighted the impact of the radio programs on media education, public health awareness, and behavior changes. Findings indicated that Radio Mattoli significantly contributed to raising awareness about COVID-19 prevention, dispelling myths, and enhancing confidence in vaccines. However, challenges such as limited access to radios, technological barriers, and persistent mistrust of vaccination in some subgroups were noted. The study also highlights the importance of strengthening media literacy to empower listeners in making informed health decisions. In conclusion, community radio proved to be a vital platform for health communication, but its effectiveness could be enhanced by addressing infrastructure limitations and integrating more localized, culturally appropriate content. The research offers valuable insights into the potential of community media to support public health efforts in Indigenous populations.

Keywords: community radio, community media, health communication, health literacy, media education, tribal communities

I. INTRODUCTION

Community radio has emerged as a powerful tool for empowering marginalized communities, particularly in rural and tribal areas, where access to mainstream media is often limited. Community radio's unique approach to broadcasting has made it an effective medium for addressing various issues, from health education (Rajana et al., 2020) to women's empowerment (Nirmala, 2015). In rural and tribal areas, where access to information and resources is often scarce, community radio has played a crucial role in bridging the gap and providing a voice for the voiceless (Al, 2021). Furthermore, media literacy is critical in influencing public health outcomes (Ibrahim et al., 2024) whether it is mainstream media or community media. The role of community radio in promoting health education cannot be overstated as it serves as a vital platform for disseminating crucial information and empowering marginalized communities to make informed decisions about their well-being (Rajana et al., 2020). The COVID-19 pandemic, one of the most significant global health crises (Ratzan et al., 2020) in recent history, has affected every corner of the world, including rural and tribal populations (Bambra et al., 2020). In India, where the pandemic posed unprecedented challenges, the impact on indigenous communities has been particularly profound. Effective communication of health information became crucial to curbing the spread of the virus and ensuring the well-being of marginalized communities.

As per the 2011 census, Kerala the southern state has a tribal population of 484,839 which is 1.5 percent of the total tribal population in India. The Wayanad district in Kerala has the highest tribal population (1,51,443) (Schedule Tribes: Population, Socio-Economic Conditions and Development Expenditure, n.d.). Community radio plays an essential role in the daily lives of tribal communities as it acts as a catalyst for the holistic development of people and societies and provides a channel for the unrestricted exchange of useful information intended to bring about socioeconomic improvements in the community (Balu & Balasubramanian, 2015). The community radio station called 'Radio Mattoli' was founded in 2009, in Wayanad district in Kerala to provide marginalized people in its broadcast area with a reliable source of information to aid in their socioeconomic and cultural development. Kerala, known for its robust healthcare system, managed the COVID-19

pandemic relatively well compared to other Indian states (Choolayil & Putran, 2020). However, the challenge of reaching remote areas with clear, consistent information remained. Many rural regions, including Wayanad, have high populations of indigenous and tribal communities, who often rely on traditional media, particularly radio, due to low internet penetration (Suresh et al., 2022). Radio Mattoli had already established itself as a trusted voice in the tribal communities in Wayanad district, and with the advent of COVID-19, its role became even more critical. With the rapidly evolving nature of the pandemic, many people in Indigenous communities were left confused or misinformed about preventive measures, the importance of masks, social distancing, and the availability of vaccines. In this scenario, the community radio 'Radio Mattoli, tied up with the health authorities and officials and produced programs translated into local languages and tribal dialects, ensuring that the most vulnerable populations could understand critical information. The Mattoli community radio has a specialized slot called 'Thudichatham' dedicated to tribal communities. This particular program has emerged as an influential tool in enhancing media literacy during the pandemic. This study focuses on the intersection of media education and public health communication, examining how Radio Mattoli's COVID-19 programs enhanced media literacy among tribal listeners.

Research Questions

1. How did COVID-19-related radio programs on Radio Mattoli impact the tribal communities' understanding of the pandemic?
2. What role did Radio Mattoli play in disseminating essential health information during the COVID-19 pandemic for tribal listeners?

II. METHODOLOGY

The study adopted a qualitative research design with an exploratory approach to understand how tribal listeners interacted with and responded to COVID-19-related radio programs. The qualitative approach will help to uncover tribal listeners' personal experiences with the community radio programs, their understanding of the health messages, and the influence of these programs on their health-related behaviors and media literacy. The locale for the study was Noolpuzha Grama Panchayath in Wayanad district. It is situated in Sultan Bathery Taluk with a total tribal population of 15415. For the study, the researcher used a multi-stage sampling method. The Noolpuzha Grama Panchayath has been divided into 17 wards. From these wards, 8 wards were selected through systematic random sampling with a constant ($k=2$). Through a purposive sampling method, the researcher has identified 16 participants who were regular listeners of community radio programs. Given the involvement of vulnerable populations, this study adhered to strict ethical guidelines. Before participation, informed consent was obtained from all participants. The nature and purpose of the research, the voluntary nature of participation, and the right to withdraw at any time without penalty were clearly explained in the participants' native languages or tribal dialects. For participants with limited literacy, consent was obtained orally, with a witness present. Consent forms were provided in simple language, and for those who required assistance, the researchers or a translator explained the details verbally. Participants were given ample opportunity to ask questions and clarify any doubts before giving consent. The confidentiality of all participants was rigorously maintained throughout the study.

For the data collection, the researcher used semi-structured, in-depth interviews with the help of an interview guide book consisting of 12 questions. The data collected from the interviews were analyzed using a thematic analysis approach. This method involves identifying, analyzing, and reporting patterns within the data.

III. RESULTS

The analysis resulted in four themes: *awareness of COVID-19 and health protocols*, *influence on vaccination uptake*, *challenges and barriers*, and *strengthening media literacy*. Each theme highlighted the impact of the radio programs on media education, public health awareness, and behavior changes among tribal listeners in Wayanad District, Kerala.

3.1 Increased Awareness of COVID-19 and Health Protocols

Many participants reported that the radio programs significantly improved their knowledge of COVID-19 and the necessary precautions. Before listening to Radio Mattoli's broadcast, many tribal listeners were either unaware or confused about the virus and the importance of following health protocols. One participant said "*I have learned about the importance of wearing masks, practicing social distancing, and frequent hand washing through radio messages. There were repeated broadcasts in local tribal dialects, which made the information more accessible*". Another participant said, "*During COVID-19, our family used to hear the radio programs regularly, and we considered Radio Mattoli a trustworthy source of information.*" Most of the participants said that they rely more on community radio programs, rather than other media forms like social media, where misinformation was rampant. Listeners appreciated the clarity and consistency of the radio programs.

3.2 Influence on Vaccination Uptake

The community radio programs were key in addressing vaccine hesitancy among tribal populations. One participant said *“I was quite nervous at the beginning when the government announced the COVID-19 vaccine. But then through radio programs, we heard the experiences of people who had taken the vaccination, it helped me feel reassured.”* Most of the participants mentioned that the programs effectively countered widespread myths and conspiracy theories about the vaccine, including fears about its side effects and suspicions about government motives. Radio Mattoli’s detailed explanation of the vaccine development process and its functioning in the human body made participants more confident about getting vaccinated. One listener said, *“The way they explained how the vaccine works in our body made me understand why it’s necessary. It cleared my fears.”* Interviews with local health workers indicated that areas with strong radio listenership saw higher vaccination rates. Listeners who regularly tuned into Radio Mattoli programs were more likely to report for vaccination at local centers, as they felt more informed and less fearful.

3.3 Strengthening Media Literacy

A significant outcome of the radio programs was an increase in media literacy among tribal listeners, especially regarding health-related information. Listeners reported that after hearing radio programs that emphasized the importance of using credible sources, they became more critical of information spread through social media and word-of-mouth. One participant mentioned, *“Before, I believed everything I heard from others about the vaccine, but now I know to check with Radio Mattoli or the health center.”* The programs empowered listeners to seek additional information from trusted sources. Many participants stated that they now felt more confident engaging with media, not just as passive consumers, but as active evaluators of content. Another participant said, *“Radio Mattoli helped us understand what was important, like taking the vaccine and protecting ourselves, not all the gossip.”* Radio Mattoli played a crucial role in emphasizing public health priorities, such as vaccination, safety protocols, and combating misinformation. By repeatedly broadcasting essential health messages, it created an agenda that prioritized public health over fear or speculation. As listeners became aware of this function, they gained insights into how media can be used as a tool for social good.

3.4 Challenges and Barriers

Despite the positive impact of the radio programs, several barriers to accessing and fully understanding the content were noted. A small portion of participants reported that they did not have regular access to a radio, particularly in the more remote tribal settlements. This limited their exposure to the COVID-19 programs. Community members often gathered in groups to listen to broadcasts, but those who missed group sessions felt disconnected from the information flow. Although Radio Mattoli broadcasted in multiple tribal dialects, some participants from smaller tribal groups mentioned difficulty understanding certain medical terms. They expressed a desire for more frequent broadcasts in their specific dialect and simpler explanations for complex health information. While radio remains a reliable form of communication in rural and tribal areas, participants also pointed out that limited mobile phone signal and internet connectivity further exacerbated communication barriers. Some listeners suggested that if mobile signals were more reliable, Radio Mattoli’s programs could be supplemented by mobile phone messages, which would have reached more people. Another participant said, *“Sometimes it was difficult for us to completely resonate with the bio-medical terms they used to describe the pandemic”*. Despite the effectiveness of Radio Mattoli in addressing vaccine hesitancy, certain tribal subgroups continued to experience deep-seated mistrust of vaccines and public health interventions, which presented a barrier to the programs’ full impact.

IV. DISCUSSION

This study examined the impact of COVID-19 radio programs on tribal listeners of Radio Mattoli in Wayanad District, Kerala, focusing on how these programs contributed to media education and public health awareness. The findings provide valuable insights into the role of community radio as a tool for health communication in marginalized and underserved communities, highlighting both the successes and challenges faced during the pandemic. Radio Mattoli, through its localized approach, succeeded in bridging the gap between mainstream public health campaigns and the unique needs of Wayanad’s tribal populations. The findings align with prior research that highlights the importance of community media in reaching rural and marginalized populations (Valentín-Sívico et al., 2023; Agarwal, 2022; Malhotra et al., 2018; Jamil & Retis, 2022), particularly during public health emergencies (Omoera et al., 2020; Roy et al., 2021; Govindarajan et al., 2023; Murali et al., 2022; Choukou et al., 2022). In many cases, community radio has proven to be a trusted source of information due to its ability to deliver content in local languages and dialects, as well as its connection to the cultural context of the listeners (Essel & Govender, 2023; Pavarala & Malik, 2021; Sujoko et al., 2023). One of the key outcomes of the study was the improvement in media literacy among tribal listeners. The radio programs not only informed the community about COVID-19 but also equipped them with the skills to critically evaluate the media they consumed. The finding is significant, as it suggests that media education through radio (Okeke et al., 2020; Keefer & Khemani, 2014) can go beyond the immediate goal of delivering

health information to foster long-term changes in how individuals interact with media. The success of Radio Mattoli in strengthening media literacy resonates with studies that have explored the concept of critical health literacy (Okan et al., 2021), which emphasizes not just access to health information but the ability to evaluate and act upon it. By learning to differentiate between credible and non-credible sources, tribal listeners became more empowered in their decision-making processes, particularly when it came to health behaviors like vaccination. This shift from passive media consumption to active engagement is a notable achievement, especially in communities with limited access to public healthcare (Derose et al., 2011). The study also addressed how the radio programs were particularly effective in addressing vaccine hesitancy, a major challenge in the fight against COVID-19. By debunking myths and providing clear, scientifically accurate information about vaccines, Radio Mattoli played a key role in encouraging vaccination uptake among tribal listeners. The study's findings are consistent with global research showing that targeted health communication can reduce vaccine hesitancy (Reddinger et al., 2022; Chou & Budenz, 2020; Strully et al., 2021), particularly when the information is delivered through trusted community channels (Robinson et al., 2014; Kshatri et al., 2021). However, the persistence of vaccine hesitancy in certain subgroups within the tribal community points to the need for continuous engagement and dialogue. While Radio Mattoli succeeded in dispelling some myths, deep-rooted fears and mistrust often influenced by historical marginalization and limited interaction with formal healthcare systems remained prevalent among certain groups. The findings of this study have important implications for future health communication strategies in rural and marginalized communities. The success of Radio Mattoli demonstrates the potential of community radio as a powerful tool for health education, particularly in areas where access to other forms of media is limited. However, to maximize its impact, community radio must be supplemented with efforts to overcome barriers such as limited access to devices and infrastructure.

V. CONCLUSION

The study explored the impact of Radio Mattoli's COVID-19 radio programs on tribal communities in Wayanad District, Kerala, emphasizing the role of community media in enhancing public health awareness and media literacy. The findings revealed that community radio can be a powerful and trusted medium for disseminating crucial health information in marginalized, remote communities, particularly during public health crises like the COVID-19 pandemic. Radio Mattoli successfully bridged the information gap by providing culturally relevant content in local dialects, thereby addressing vaccine hesitancy, dispelling myths, and promoting preventive health behaviors. However, several challenges and barriers including limited access to radios, infrastructure constraints, language difficulties, and persistent mistrust of vaccines highlight the need for continuous, context-sensitive engagement with tribal populations. These obstacles point to the importance of expanding communication strategies to include more accessible technologies, enhancing cultural alignment in health messaging, and fostering greater media literacy to empower these communities to navigate health information independently. To conclude, the study emphasizes the transformative role of community radio in promoting health literacy and addressing public health challenges in marginalized communities. It calls for continued investment in community-driven, culturally sensitive communication efforts that engage tribal populations, both during health crises and beyond, to build a more informed and empowered society.

REFERENCES

1. Ibrahim, A.M., Sanda,H.U., Kurf,M.Y., & Ibrahim,A.T. (2024). The use of social television in interactive health communication with implications for media literacy. *Media Education (Mediaobrazovanie)*, 20(3), 398–407.
2. Agarwal, V. (2022). Editorial: Communicating for social justice in health contexts: Creating opportunities for inclusivity among marginalized groups. *Frontiers in Communication*, 7. <https://doi.org/10.3389/fcomm.2022.1008533>.
3. Al, L. S. E. (2021). Effectiveness of community radio in preservation and promotion of the indigenous culture. *Psychology and Education Journal*, 58(1), 5678–5691. <https://doi.org/10.17762/pae.v58i1.2202>.
4. Balu, B. G. J., & Balasubramanian, A. (2015). Tribal language and community radio: A case study on “Radio Mattoli” Wayanad, Kerala, India. *Online Journal of Communication and Media Technologies*, 5(September 2015-Special Issue), 160–170. <https://doi.org/10.30935/ojcm/5698>.
5. Bambra, C., Riordan, R., Ford, J., & Matthews, F. (2020). The COVID-19 pandemic and health inequalities. *Journal of Epidemiology & Community Health*, 74(11), 964–968. <https://doi.org/10.1136/jech-2020-214401>.
6. Choolayil, A. C., & Putran, L. (2020). Covid-19, The local and the global: Lessons from Kerala. *South Asia Research*, 41(1), 7–21. <https://doi.org/10.1177/0262728020966102>.

7. Chou, W. S., & Budenz, A. (2020). Considering emotion in COVID-19 vaccine communication: Addressing vaccine hesitancy and fostering vaccine confidence. *Health Communication, 35*(14), 1718–1722. <https://doi.org/10.1080/10410236.2020.1838096>.
8. Choukou, M., Sanchez-Ramirez, D. C., Pol, M., Uddin, M., Monnin, C., & Syed-Abdul, S. (2022). COVID-19 infodemic and digital health literacy in vulnerable populations: A scoping review. *Digital Health, 8*, 205520762210769. <https://doi.org/10.1177/20552076221076927>.
9. Derose, K. P., Gresenz, C. R., & Ringel, J. S. (2011). Understanding disparities in health care access—and reducing them—through a focus on public health. *Health Affairs, 30*(10), 1844–1851. <https://doi.org/10.1377/hlthaff.2011.0644>.
10. Essel, E., & Govender, E. (2023). Vernacular radio and the practice of resistance: community radio as a cultural tool to engage on health and social identities among marginalized communities in Ghana. *Journal of Radio & Audio Media, 30*(1), 99–118. <https://doi.org/10.1080/19376529.2022.2142230>.
11. Govindarajan, G., Geetha, K., Patra, S. K., & Sreekumar, T. (2023). Enhancing social capital and reciprocity through community news media during COVID-19: a study of video volunteers. *Online Information Review, 47*(7), 1396–1414. <https://doi.org/10.1108/oir-09-2022-0514>.
12. Jamil, S., & Retis, J. (2022). Media discourses and representation of marginalized communities in multicultural societies. *Journalism Practice, 17*(1), 1–4. <https://doi.org/10.1080/17512786.2022.2142839>.
13. Keefer, P., & Khemani, S. (2014). Mass media and public education: The effects of access to community radio in Benin. *Journal of Development Economics, 109*, 57–72. <https://doi.org/10.1016/j.jdeveco.2014.03.010>.
14. Kshatri, J. S., Palo, S. K., Panda, M., Swain, S., Sinha, R., Mahapatra, P., & Pati, S. (2021). Reach, accessibility and acceptance of different communication channels for health promotion: a community-based analysis in Odisha, India. *PubMed, 62*(2), E455–E465. <https://doi.org/10.15167/2421-4248/jpmh2021.62.2.1929>.
15. Malhotra, A., Sharma, R., Srinivasan, R., & Mathew, N. (2018). Widening the arc of indigenous communication: Examining potential for use of ICT in strengthening social and behavior change communication efforts with marginalized communities in India. *The Electronic Journal of Information Systems in Developing Countries, 84*(4). <https://doi.org/10.1002/isd2.12032>.
16. Murali, K., Balagopalan, N., Benawri, J., Bairagi, A. K., Heggannanavar, N. V., Srivastava, A., & Mahajan, S. (2022). Knowledge, attitude, and practices related to COVID-19 among poor and marginalized communities in central India: A cross-sectional study. *PLoS ONE, 17*(4), e0264639. <https://doi.org/10.1371/journal.pone.0264639>.
17. Nirmala, Y. (2015). The role of community radio in empowering women in India. *Media Asia, 42*(1–2), 41–46. <https://doi.org/10.1080/01296612.2015.1072335>.
18. Okan, O., Messer, M., Levin-Zamir, D., Paakkari, L., & Sørensen, K. (2021). Health literacy as a social vaccine in the COVID-19 pandemic. *Health Promotion International, 38*(4). <https://doi.org/10.1093/heapro/daab197>.
19. Okeke, A. O., Nwosu, J. C., & Ono, G. N. (2020). Use of radio as a tool of learning in crisis period. *Nnamdi Azikiwe University Journal of Communication and Media Studies, 1*(2). <https://doi.org/10.47851/naujocommed.v1i2.95>.
20. Omoera, O. S., PhD, Onyemuchara, C. E., & Okwuowulu, C. (2020). Nigerian rural communities and media marginalization on covid-19: perspectives on participatory video. *The Journal of Society & Media, 4*(2), 385. <https://doi.org/10.26740/jsm.v4n2.p385-405>.
21. Pavarala, V., & Malik, K. K. (2021). Community radio for social change: restoring decentralized democratic discursive spaces. In *Edward Elgar Publishing eBooks*. <https://doi.org/10.4337/9781789906356.00019>.
22. Rajana, V., Prasad, K. K. L., & Madhavi, B. D. (2020). Is community radio an effective tool for health education? Perceptions of stakeholders of a community radio project in north coastal Andhra Pradesh. *International Journal of Community Medicine and Public Health, 7*(4), 1522. <https://doi.org/10.18203/2394-6040.ijcmph20201467>.
23. Ratzan, S., Sommariva, S., & Rauh, L. (2020). Enhancing global health communication during a crisis: lessons from the COVID-19 pandemic. *Public Health Research & Practice, 30*(2). <https://doi.org/10.17061/phrp3022010>.
24. Reddinger, J. L., Levine, D., & Charness, G. (2022). Can targeted messages reduce COVID-19 vaccination hesitancy? A randomized trial. *Preventive Medicine Reports, 29*, 101903. <https://doi.org/10.1016/j.pmedr.2022.101903>.
25. Robinson, M. N., Tansil, K. A., Elder, R. W., Soler, R. E., Labre, M. P., Mercer, S. L., Eroglu, D., Baur, C., Lyon-Daniel, K., Fridinger, F., Sokler, L. A., Green, L. W., Miller, T., Dearing, J. W., Evans, W. D., Snyder, L. B., Viswanath, K. K., Beistle, D. M., Chervin, D. D., . . . Rimer, B. K. (2014). Mass media health communication campaigns combined with health-related product distribution. *American Journal of Preventive Medicine, 47*(3), 360–371. <https://doi.org/10.1016/j.amepre.2014.05.034>.
26. Roy, D., Das, M., & Deshbandhu, A. (2021). Postcolonial pandemic publics: examining social media health promotion in India during the COVID-19 crisis. *Health Promotion International, 37*(2). <https://doi.org/10.1093/heapro/daab076>.
27. *Schedule Tribes: Population, Socio-Economic Conditions and Development Expenditure*. (n.d.). <https://keralaeconomy.com/admin/pdfs/st.pdf>.

28. Strully, K. W., Harrison, T. M., Pardo, T. A., & Carleo-Evangelist, J. (2021). Strategies to address covid-19 vaccine hesitancy and mitigate health disparities in minority populations. *Frontiers in Public Health*, 9. <https://doi.org/10.3389/fpubh.2021.645268>.
29. Sujoko, A., Rahmiati, D., & Rahman, F. (2023). The role of radio as the public sphere for public political education in the digital era: Challenges and pitfalls. *Cogent Social Sciences*, 9(1). <https://doi.org/10.1080/23311886.2023.2239627>.
30. Suresh, K., Kumar, M., & Shinli, V. (2022). Tribal healthcare system in kerala during the pandemic. *Dera Natung Government College Research Journal*, 7(1), 83–93. <https://doi.org/10.56405/dngcrj.2022.07.01.09>.
31. Valentín-Sívico, J., Canfield, C., Low, S. A., & Gollnick, C. (2023). Evaluating the impact of broadband access and internet use in a small underserved rural community. *Telecommunications Policy*, 47(4), 102499. <https://doi.org/10.1016/j.telpol.2023.102499>.