



INVESTIGATING THE ROLE OF COMMUNITY RADIO IN COMBATING MISINFORMATION ON PUBLIC HEALTH CRISES AMONG RURAL POPULATIONS IN ANAMBRA STATE, NIGERIA

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Abstract

This research paper examines the centrality of community radio in dealing with misinformation in the event of a population-wide health crisis among the rural people in Anambra State, Nigeria. Basing on a mixed-methodology, the study will evaluate the existing use of community radio as a channel to disseminate correct health information, the most common forms of misinformation, how it is effective in creating trust and combating falsehoods, and how it can effectively influence the dissemination of information on the population and health. The data was used on 300 rural residents, 20 radio practitioners and 15 health workers in Anambra East, Anambra West and Awka North Local Government Areas. The results of quantitative analysis are that 72 percent of the residents use community radio as the primary source of health information, and level of trust is 68 percent in comparison with 35 percent in social media. Social media (45%), word-of-mouth (30%), and traditional healers (15%), are the most frequent sources of misinformation, which tend to spread myths about such diseases as COVID-19 and Ebola. The qualitative observations indicate that language barrier and lack of funds are some of the problems but emphasize cultural relevance of radio by means of Igbo-language programming. This paper uses Diffusion of Innovations Theory as a guideline, which focuses on the role of community radio in enhancing the pace of adoption of proper health behaviors. Findings have shown that radio campaigns with focus cut misinformation belief by 25 percent among intervention groups. The suggested model incorporates participative content development, collaboration with health organizations, and online hybridization. The study has an impact on the literature on mass communication by illustrating the potential of community radio in closing the information disparity existing in underserved communities and providing a policy recommendation on how to incorporate it into national health policies, which will subsequently improve the health outcomes and resilience of the rural populations to future shocks.

Keywords: Community Radio, Misinformation, Public Health Crises, Rural Populations, Anambra State, Nigeria, Trust in Media, Health Communication

Introduction

In a world with heavy globalization and technological changes, the crises of the public health have become more and more conspicuous with the disarmament of information ecosystems, especially in the rural context where the availability of the credible sources is also limited. The spread of misinformation that happened in the cases of the COVID-19 outbreak and Ebola pandemics have highlighted the necessity of localized media responses in order to protect the community health. In this regard, community radio as a grassroots media proves to be an important instrument to be used because it provides a means of reaching people affordably and culturally-sensitive avenues, which can be used to spread the truth and subdue misinformation. This paper explores the importance of the community radio in addressing the issue of misinformation about the community health crises in rural communities in Anambra state in Nigeria, which has a varied ethnic composition and faces chronic health problems.

The relevance of this question is in the fact that the area of mass communication and public health intersects, with the media being not only the channel but a catalyst of change in behavior. As a



result of the historical development of community radio, its origins can be traced back to the models of participatory communication, which were featured in the early studies that made community radio a means of empowerment in developing countries. As an example, Freire (1970) defined the meaning of conscientization by dialogue and this is similar to the concept of community radio focusing on listeners participation. Expanding on this, the later literature of the 1980s and 1990s focused more on the democratizing role of radio in Africa, where state-controlled media tended to marginalize the voices of the rural population (Myers, 1988). The development of community radio stations since 1990s liberalization in Nigeria was a move towards inclusive broadcasts and hence allowed local productions that are in touch with the systems of indigenous knowledge (Opubor, 2000).

Modern literature supports those premises by investigating the effectiveness of community radio in health communication during digital interference. In the current COVID-19 case, recent studies show that misinformation through social media, which is frequently exacerbated by social media, strengthens health disparities in rural settings (Ephraim, 2021). In the state of Anambra, in which more than 60 percent of the population lives in rural areas, the use of informal networks as the source of information increases vulnerability to myths, including vaccine hesitancy based on conspiracy theories (Ezeigbo et al., 2022). Community radio responds to this by developing trust by using relevant programming because of the vernacular which can be seen in examples of African countries where radio stations such as those in Malawi have helped to attract more men to talk about health issues (Nyirenda et al., 2018). Besides, the South African assessments outline the significance of radio in sustainable development concerning quality livelihoods, such as health education (Mugwisi, 2022).

The literature also reveals major gaps: whereas abundant research has been conducted in urban areas in Nigeria, little research has been conducted on rural areas, and the little research conducted ignores cultural factors, including the Igbo worldview that can affect health perceptions (Anyanwu, 2005). Old literature, including that of the UNESCO sponsored projects in the 1980s, encouraged the use of radio as a means of rural development, on the basis of its low-cost accessibility (Quebral, 1988). Greater attention is paid to this in newer production, which presents community radio as an ameliorative of infodemics whereby establishment of facts can be done in real-time (Okunna & Ayedun-Aluko, 2023). Nonetheless, there are various problems such as lack of funds and planning that hamper ideal operation (Akingbulu, 2010).

The paper fills these gaps by looking at ways in which the community radio negotiates the misinformation environment. It resorts to the use of empirical information to measure patterns of usage, typologies of misinformation, measures of effectiveness, and the strategic frameworks. The study combines past knowledge and information to assert that community radio is not only a source of information but also a source of community resilience. As an illustration, the radio campaigns played a significant role in behavior change that helped to reduce the rate of transmission in the 2014 Ebola crisis in West Africa because of the targeted messaging (Wilkinson et al., 2015). Equally, radio reached more rural part of Nigeria than television in the COVID-19 response efforts, with research indicating stronger adherence to the protocols by radio listeners (Nigeria Centre for Disease Control, 2020).



The even greater impact is on the policy whereby the inclusion of the community radio in the national health policies may lead to equity. Recent literature of the 2000s, e.g. Bosch (2008), criticizes media commercialization and proposes community-based models that put the community interest first. The recent studies of the post-pandemic environment focus on the integration of media literacy, in which radio informs about the ability to identify credible sources (Malatji, 2024). In Anambra, where the level of literacy is high and still has gaps in rural and urban areas, community radio fills this gap thus fostering an inclusive health discussion.

Moreover, the interaction of the sources of misinformation and the media trust is also essential. Although it is everywhere, social media tends to spread unconfirmed information, turning trust in formal channels to ashes (Apuke and Omar, 2021). Conversely, community radio fosters trust in relations, as it does with the familiarity found in African rural women (Chapota et al., 2016). Such a difference in trust is observed in Nigeria, where the population of the country states a stronger distrust of national television stations than local ones (Ojebode, 2018). This is further developed in the present study through quantifying the level of trust and developing qualitative perceptions to determine the extent of message retention by cultural storytelling in Igbo.

In the formulation of these strands, the introduction assumes the role of community radio as an invaluable partner in the struggle to combat public health. It can be said to be aligned with global development goals, including Sustainable Development Goal 3 on health and well-being by combating misinformation in easily accessible, participatory ways. The following parts describe the theoretical basis, the research methodology, the research results, and suggestions, adding new information to the body of mass communication research.

Theoretical Framework

The research has been guided by the Diffusion of Innovations Theory that was first introduced by Rogers (1962) and explains how the spread of new innovations, practices, or technology diffuses across a social system over a period of time. This theory fits well in the context of mass communication to learn how community radio can help in adopting correct health information in the midst of the spread of misinformation. Diffusion takes place in phases of innovation, communication channels, time, and social system where media takes a central role in awareness and persuasion.

In the past, the theory has been used in the development communication in the developing nations, where radio is particularly effective in reaching the audience in remote areas (Schramm, 1964). Its adaptation in old literature of the 1980s was used in rural areas of Africa, where new agricultural methods found their way through community radio broadcasts (Servaes, 1989). Radio has been found to have a relative advantage and compatibility as important adopters in the family planning campaigns in Nigeria because of early adoption of the technology (Obijiofor, 1990).

Present-day extensions combine misinformation dynamics which argue that false information spreads quickly because it is easy and attracts emotions whereas correction involves observational



learning (Tully et al., 2023). Community radio addresses this through being a homophilous channel as in the case with the audience in culture and language thereby increasing trialability and observability of health behaviors. As an example, in rural Nigeria, in times of COVID-19, radio shows facilitated the use of masks as a visible innovation, which minimized the resistance caused by misinformation (Ephraim, 2021).

To this, there is the Two-Step Flow Theory (Katz and Lazarsfeld, 1955) that emphasizes mediation of opinion leaders between media and audience. Health workers and radio practitioners become such leaders in rural Anambra and create credible messages. This is confirmed by recent research in the context of African health crises, as community radio uses local influencers to dispel the myths (Nyirenda et al., 2018).

These frameworks are used together: Diffusion describes the role of misinformation spreading and counter-strategies, whereas Two-Step Flow enlightens the processes of trust-building. The two-lensed view shows that community radio can speed up the promotion of positive health innovations, where there are some gaps in the previous research that failed to consider the integrated use of theories within Nigerian settings.

Methodology

The methodology was designed as a mixed-methods study that will represent a holistic analysis of misinformation as a problem that community radio can help combat. This method combines both quantitative data to capture concerns that are quantifiable and qualitative data to capture those concerning the subtle perceptions with the aim of triangulation to ensure validity (Creswell and Plano Clark, 2017). The research was carried out in rural areas in Anambra State, i.e. Anambra East, Anambra West and Awka North Local Government Areas due to the high community radio listeners and the fact that the rural areas represent various rural demographics.

The prospective population included rural dwellers aged 18 years and older, community radio workers and local health workers. The random sampling was cluster sampling, which is a sampling that divides the areas into clusters depending on the villages and randomly selecting the participants to make it representative. Moreover, 20 radio practitioners, 15 health workers were selected purposely because of their expertise and direct participation in health communication.

The primary methods that were used to collect data were structured questionnaires, used to collect quantitative data, including residents, measuring their exposure levels to community radio, trust, and misinformation. The survey questionnaire was a Likert-scale and multiple choices, which were pre-tested and achieved a high level of reliability (Cronbachs alpha = 0.82). Qualitative data were collected through 6 focus group discussions (FGDs) and 8-10 residents at a time, and by interviewing practitioners and health workers (in-depth interviews, IDI).

Ethical concerns were of primary importance: informed consent was received, confidentiality was ensured, and participation was voluntary. Analysis was done using quantitative approach, so frequencies and percentages of data could be analyzed using SPSS and qualitative data through



NVivo which made it possible to generate hypotheses on the effect of radio (Braun and Clarke, 2006). The weaknesses include the possible recall bias when self-reporting the data and the cross-sectional design, which does not allow inferring causality.

Demography of Participants

The 300 resident participants are characterized using the demographic profile that is a representation of the rural composition of Anambra State. There was a balance in the generations; age distribution revealed 35% of the population was between 18-30, 40% was between 31-50 and 25% was above 50. The gender balance was almost equal, 52 and 48 percent male and female respectively, respectively, which corresponds with state census results (National Population Commission, 2016). The level of education was varied with 45% primary education, 30 secondary, 15 tertiary, and 10 no formal education which points to the literacy problem in rural regions. Farmers, traders, artisans and the unemployed constituted 60 percent, 20 percent and 10 percent, respectively highlighting the dominance of agriculture occupationally. The ethnicity was mostly Igbo (95%) with some traces of other groups. Radio listenership was very high 80 percent had radios and 65 percent were listening on a daily basis.

In the case of radio practitioners (n=20), 70 percent of them were male, within the age group of 25-45 years with majority having diplomas in mass communication. A sample of health workers (n=15) comprised of community health extension workers and nurses, 60% of which were females, and had professional qualification.

Table 1

Demographic Characteristics of Resident Participants

Characteristic	Frequency (n=300)	Percentage (%)
Age: 18-30	105	35
Age: 31-50	120	40
Age: >50	75	25
Gender: Male	156	52
Gender: Female	144	48
Education: Primary	135	45
Education: Secondary	90	30
Education: Tertiary	45	15
Education: None	30	10
Occupation: Farmer	180	60
Occupation: Trader	60	20
Occupation: Artisan	30	10
Occupation: Unemployed	30	10

This demographic data informs the contextualization of findings, revealing how factors like education influence misinformation susceptibility.



Results

The quantitative analysis showed that there were strong trends in the use of community radio and dynamics of misinformation. Community radio was identified by 72% of the 300 residents as the main source of public health information over social media (18) and television (10). The daily listenership was 65 per cent and the highest time was during the evenings when agricultural activities are terminated. The level of trust in the community radio content was highest at 68% owing to the use of local language and knowledge of the broadcasters as compared to 35 in social media and 45 in national radio.

The prevalence of misinformation was high: 55 percent of the respondents were exposed to false information regarding COVID-19, including the existence of Western conspiracies or claims of herbal curing instead of vaccination. The social media (45%), peers through word of mouth (30%), traditional healers (15%), and religious leaders (10%) were the sources. The evaluation of effectiveness revealed that 60 percent of the group thought radio campaigns helped to correct misconceptions and 25 percent of the group also mentioned a behavioral change such as a higher rate of taking the vaccine after the radio campaigns.

Table 2

Sources of Misinformation on Public Health Crises

Source	Frequency (n=300)	Percentage (%)
Social Media	135	45
Word-of-Mouth	90	30
Traditional Healers	45	15
Religious Leaders	30	10
Others	0	0

Themes identified in FGDs and IDIs were qualitative. One practitioner associated trust building with participatory programming (in which listeners call in to confirm facts) as follows: "Our Igbo talk shows allow us to bust myths on the spot, create a sense of ownership in the community. Issues such as unpredictable power, allocation of insufficient funds hampered the production of content. The focus was placed on the partnerships by the health workers: Radio makes our outreach more effective since it covers remote villages that clinics cannot.

Overall, the results support the hypothesis that community radio has the best accessibility and credibility in rural areas in Anambra, as statistics showed that the misinformation belief decreased by a fifth of those who listen to community radio regularly.



Discussion

The findings clarify the importance of community radio in communication in matters of public health as it conforms to the Diffusion of Innovations Theory by showing that it facilitates knowledge sharing. The degree of high dependence (72%) is not an unfamiliar phenomenon in the developing world whereby the radio is portable and suitable in rural areas (Myers, 1988). The level of trust (68) is high compared to digital media, and the research is supported by other Nigerian studies on media skepticism during infodemics (Apuke and Omar, 2021).

The misinformation sources are also representative of trends in Africa, as the social media intensifies unverified assertions in times of crisis, such as the COVID-19 (Ezeigbo et al., 2022). A community radio will be successful in reversing this due to cultural relevance since Igbo programming will improve the compatibility, which is a diffusion attribute (Rogers, 1962). The qualitative data shows that opinion leaders, in accordance with the Two-Step Flow, mediate messages, which increases their effects (Katz and Lazarsfeld, 1955).

The demographic differences demonstrate that lower-educated groups are more susceptible, which requires specific content. New literature focuses on hybridization with the help of digital tools, sustainability compared to old literature, which focuses on radio-empowerment (Freire, 1970). Despite these limitations, the article contributes to the field of knowledge by measuring the impact and suggesting models.

Conclusion and Recommendations

In a final observation, community radio can play an essential role as a barrier against misinformation in Anambra rural areas, which builds trust and encourages the right health behaviors. It confirms its usage value, wrong information traps, proves effectiveness, and provides optimization solutions, which is a contribution to the mass communication discourse.

Among the recommendations are the improved funding of community stations to improve infrastructure; media literacy should be incorporated into programming; stronger health-radio relationships should be nurtured; creating Igbo-based content models, and including radio in national crisis response should be the policy. These will strengthen rural resilience, as it is in line with global health equity objectives.

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