

## **An Analysis of Community Engagement through Community Radio during the Covid-19 Pandemic amongst Select Communities in Kenya**

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### **Abstract**

*This study aims to investigate the kind of messages that were disseminated by community radio stations about the Covid-19 pandemic, the audience's perception towards this information and their confidence in the interventions and control measures that were propagated by these stations. The Health Belief Model was used to inform the study as it focuses on effective health communication that advocates for behaviour change through the provision of information. This study was conducted in two Sifa FM community radio stations in Kenya that is Sifa FM Voi and Sifa FM Marsabit. Data were collected through interview guides, questionnaires, document review and content analysis on radio programmes and advertisements. The target population consisted of the programme developers and hosts of the selected radio stations, their listeners and their radio programmes. Purposive sampling was used to select 12 participants as the KIIs, who included 10 community leaders and two station managers, while random sampling was used to select 100 listeners from Voi in Taita Taveta County and 100 from Marsabit County. A few Covid-19 related programmes were also sampled. The open-ended questions were analyzed using content analysis and the interviews using thematic analysis. The results indicated that the radio stations played a significant role in disseminating COVID-19 related messages through various programmes and that the audience perceived the messages to be informative, especially with regard to preventive measures, transmission of the disease and the symptoms of the disease. This study uses the constructs of HBM as a guide to explain how people changed their behaviour towards behaviour that limited the spread of Covid-19. The study concludes that HBM can be used to study the Covid-19 situation. It suggests that community radio was an appropriate tool that was used to mitigate misinformation and to help the community in selecting healthy behaviours.*

**Key Words:** Covid-19 Pandemic, Community Engagement, Community Radio, Health Belief Model, Kenya

### **1.0 Introduction**

This study looked at community engagement through community radio and investigated the kind of messages about the Covid-19 pandemic that were disseminated by community radio stations, the audience's perception towards this information, and their confidence in the interventions and control measures that were propagated by the stations. This focus of this study was to explore the role of community radio in community engagement in response to the Covid-19 pandemic among selected communities in Kenya with reference to two Sifa FM radio stations located in Taita Taveta and Marsabit Counties. Table 1: Areas of Coverage and Audience Listenership. The study is significant in understanding the anticipated changing scenarios that characterized the Covid-19 pandemic period. Research findings help

to identify and fill existing gaps in the literature and to provide insights on community radio messages during the pandemic.

**Table 1**

**Areas of Coverage and Audience Listenership**

| <b>Station/<br/>Location</b> | <b>Reach coverage /<br/>Language</b>   | <b>Composition/ Target<br/>Audience</b>   | <b>Peak listenership<br/>Different groups (Monday- Friday)</b>  |
|------------------------------|--|---|---|
| SIFA 101.1FM<br>Marsabit     | 150-200km radius<br>Marsabit county<br>300,000 people<br>Borana, Rendile,<br>Swahili and<br>Samburu<br>languages | Borana, Gabra--, Burji,<br>Rendille, Wata, Konso,<br>Samburu,<br>El molo, Turkana<br>Pastoralists, farmers,<br>businessmen<br>25 – 35 years | Madjirena breakfast show<br>(6am-9.30AM locals<br>(10am-1PM—) Mpango<br>Kazini Youth show<br>Shangwe Tukufu 1PM-4PM<br>Is-Helinti- Yaffet 4pm-<br>7pmRendile show (7pm -<br>12pm) Burudani (Locals)<br>Borana |
| SIFA 107.7FM<br>Voi          | 250km radius<br>Taita Taveta,<br>Kwale, Kilifi<br>counties<br>600,000 people<br>Swahili and Taita<br>languages   | Swahili, Kamba, Kikuyu<br>Farmers, businessmen  | Sifa Breakfast (6am-10am)<br>General Local<br>Zinduka Na Sifa(10-4pm)<br>Business People<br>Dhoruba ya Sifa 4-8pm Family<br>Jamvi La Gumzo 8-12pm<br>Mature Audience 30-45years.                              |
| SIFA 101.1FM<br>Lamu         | 100km Radius<br>Lamu, Kilifi<br>counties<br>100,000 people<br>Swahili language                                   | Swahili, Kikuyu, Kamba<br>Farmers, fishermen,<br>businessmen  | Sifa Breakfast (6am-10am)<br>General Local<br>Sifa Mchana (10-1pm)<br>Sifa Jioni (1pm-4pm)<br>Jamvi La Gumzo (4pm-8pm)  |

In December 2019, an outbreak of the SARS-CoV-2 virus which sparked an acute respiratory response (Covid-19) among a significant number of people, led the World Health Organization (WHO) to declare it a pandemic. According to Carico et al, (2020), the onset of the Covid-19 pandemic exposed challenges in health communication as it was a relatively new and rapidly spreading disease, and the information that was being disseminated by the scientific community was also new as the world had not experienced this disease and its effects before. This study aims to investigate the kind of messages that were disseminated by community radio stations about the Covid-19 pandemic, the audience's perception towards the information that was disseminated and the community's confidence in the interventions and control measures that were propagated by the community radio stations.

Local radio stations are a good source of information to a community because they understand the community well and they can therefore tailor-make their programmes to achieve maximum impact. Additionally, the audience is well acquainted to them and they trust their content and therefore the community is highly likely to use the information gathered from the radio station for fact-checking and as a way to counter misinformation (Okoth, 2020). Given the place of community radio within the community, this study found it necessary to investigate how the messages on Covid-19 were disseminated by Sifa FM and how the audience perceived these messages, hence focusing on the engagement of the community as a response to these messages.

Gilmore (2020) notes that in addressing the Covid-19 pandemic, some key aspects such as community engagement are very crucial. Community engagement helps to perceive community members as active and important stakeholders rather than passive people especially when faced with a situation like the Covid-19 pandemic (Gilmore, 2020). Community engagement has been useful in addressing disease outbreak and pandemic situations including the Ebola outbreak in countries like Liberia where Radio Gbarnga played a key role in fighting the disease (Farm Radio International, 2014). It has been observed that the way people interact and live with each other through their structures, as well as their historical pathways require considerations on how to effectively adapt and respond to any disease outbreak (Gilmore, 2020). Therefore, community engagement proved to be instrumental in preventing the spread of Ebola in Liberia because the community was seen as an instrumental body in fighting the disease (Bedson, 2019). According to the WHO (2020), by engaging communities in responding to Covid-19, the health sector avoided the emergence of cases that would have made the pandemic even worse. The organization noted that without community engagement,

the health sector could not have been able to respond to the pandemic well enough due to the unique challenges that each community faced (Ibid, 2020).

This study was conducted in two Sifa FM community radio stations; Sifa FM Voi and Sifa FM Marasbit. Interview guides and questionnaires were used for data collection from 12 participants for the key informant interviews, who included 10 community leaders and two station managers and 100 listeners from Voi in Taita Taveta County and 100 from Marsabit County. The data collection was mainly conducted through the use of emails, phone calls, online meetings through Google Meet and face-to-face. The study also included document review and content analysis on some of the relevant radio programmes and advertisements.

## **2.0 Literature Review**

### **The Health Belief Model**

The theoretical framework used in this study is based on the Health Belief Model. The goal of effective health communication is to advocate for behaviour change through provision of information usually by the government or by NGOs. This is known as Behaviour Change Communication (BCC); BCC theories include the Health Belief Model (HBM) and Theory of Planned Behaviour (TPB). The HBM was developed in the 1950s by social psychologists in the US Public Health Services as a way to address a failed TB health screening programme (Rosenstock, 1974). The model has been used by scholars when investigating health behaviour and particularly with regards to infectious diseases such as HIV/AIDS. The HBM assumes that people's belief about health problems, perceived benefits of action and barriers to action and self-efficacy explain engagement or lack thereof in promoting behaviour. Overall, health communication focuses on behaviour change hence, message delivery must be done appropriately for a positive impact.

The Health Belief Model (HBM) was originally developed to explain why people did not participate in programmes that could assist them diagnose or prevent diseases (Rosenstock, 1974). The main assumption of the model is that in order to engage in healthy behaviours, intended audiences are expected to be aware of their risk for severe or life-threatening diseases and perceive that the merits of behaviour change outweigh potential limitations or other negative aspects of recommended actions. Health Belief Model was developed to explain the process of change associated with health behaviour. The overall premise of HBM is that knowledge will bring change. The major contribution of HBM to the health communication

field is its emphasis on the importance of knowledge. Andreasen (1995) notes that this knowledge is brought to audiences through an educational approach, primarily focusing on messages, channels, and spokespeople. Schiavo (2007) recommends HBM for an audience-related research since it provides a useful framework to organize one's thoughts in developing an audience profile. Pechmann (2001) notes that HBM is a risk learning model because the goal is to teach new information about health risks and the behaviours that minimize those risks.

Over the years the HBM has been used in studies related to vaccination, medication adherence, diabetes self-care, condom use, among other health conditions that require change in a patient's behaviour. The HBM can be used to address public health behaviour at individual and community levels. HBM suggests that individual beliefs and direct cues to action inform behaviour. Consequently, beliefs are informed by one's background and are comprised of one's impression of the perceived threat, the perceived benefits of taking action, the perceived barriers to taking action, as well as one's perceived ability to take action (i.e. perceived self-efficacy). The study by Carico et al, (2020) offers an overview of the use of HBM in the provision of COVID-19-related health communication by community pharmacists. The study uses the constructs of HBM as a guide to explain how patients change their behaviour towards behaviour that limits the spread of COVID-19.

Various studies have shown that radio has been used as an effective tool in mitigating against the spread of infectious diseases such as Ebola in West Africa and the highly infectious novel coronavirus disease, Covid-19. Being the dominant media in most of Africa, radio serves as an effective tool to disseminate information and consequently to affect social behaviour. Okoth (2020) aimed at finding out how radio stations were demystifying the myths and misinformation on the disease and providing correct information about the disease, in order to make recommendations on behaviour change that would enable the community to cope with the containment measures by the government.

Jose et. al's (2020) study sought to investigate the community's perception towards the Covid-19 pandemic, the precautionary measures being put in place, and the community's confidence towards government interventions and control measures. Results revealed that, while 680 participants took part in the study, 675 (99.3%) were aware about the Covid-19 pandemic and 88% had sufficient knowledge of the disease. An analysis of the variables in the HBM showed a significant association with behaviour change. Most of the people in Kerala, where the study took place, had the same ideas and perceptions about Covid-19 regardless of their age, education or relationship with healthcare providers. These perceptions were

influenced by the government's primary healthcare approach. Most of the participants religiously followed the guidelines such as hand washing, social distancing and lockdown – because they believed that this would protect them from contracting the disease.

According to Maunder (2021), the HBM identifies 5 variables that predict health promoting behaviour. The first variable is perceived susceptibility, that is, the degree to which an individual feels vulnerable or susceptible to a particular health condition. Using this model, Maunder (2021) noted that people who believed they were at a high risk of contracting Covid-19 were more likely to observe the Covid-19 protocols than those who did not. Maunder (2021) also notes that the second, perceived severity is the extent to which an individual believes that contracting a condition would have serious consequences for them. Maunder (2021) notes that the third and fourth variables, perceived benefits and perceived barriers to taking action, assert that an individual's decision to take a recommended preventive health action is influenced by how effective the individual believes the health action is at reducing disease threats (i.e. benefits), less the extent to which they see the action as having negative aspects (i.e. barriers). Thus, an individual who did not believe that the Covid-19 protocols would be effective in reducing the threat of contracting Covid-19, and who also perceived many negative aspects of the protocols would most likely not follow the protocols.

### **3.0 Methodology**

This study used a mixed-method research design comprising of a survey and key informant interviews. The survey consisted of closed and open-ended questions. A number of studies on health interventions tend to make use of mixed methods (O'Cathain et al, 2007). The target population consisted of the program developers and hosts of two SIFA FM radio stations, their listeners and their radio programs. Purposive sampling was used to select 12 participants for the key informant interviews, who included 10 community leaders and two station managers. Random sampling was further used to select 100 listeners from Taita Taveta County and 100 from Marsabit County. A few Covid-19 related programs were also sampled.

This study was undertaken in two Sifa FM broadcasting stations in Kenya that are located in Marsabit County and in Voi in Taita Taveta County. These two locations are situated in rural settings where radio plays a key role in propagating health information to the local residents. Sifa FM is a non-profit Christian organization that was established by Transworld Radio-Kenya in 2008. Sifa FM seeks to empower marginalized communities in a holistic manner with targeted programs for youth and women empowerment. It seeks to transform

attitudes, beliefs, and behaviours for social change especially in the area of socio-economic development and through its programs (Sifa FM, n.d). At the onset of Covid-19, Sifa FM played a key role in the fight against the disease through their programs and outreach activities (Sifa FM Station Manager, personal information).

During the Covid-19 pandemic, Sifa FM aired various programs that disseminated information about the disease. These included: *Burudani Show*, *Rauka na Sifa*, *Sifa Biashara*, *Madjirena show* and *Mpango Kazini*. The key messages advanced on these programs were based on: vaccination campaigns, curfews and lockdowns by the national government; messages against shaking hands and avoiding crowded places; Covid-19 kills; obeying Ministry of Health (MOH) guidelines; about how to take care of the elderly; how to take care of the young ones; importance of isolation and quarantine once infected; about the severity of the disease for those with underlying conditions; about how to dispose of infected items; about how to protect oneself from airborne diseases by covering the nose and mouth; lack of correct information; how to behave when you have the symptoms; about the serious 3rd wave called 'delta'; and wearing of masks and use of sanitizers. The focus of the messages was mainly on transmission, avoidance, precautionary measures, handling, symptoms, vaccination programmes and curfews. (See: Appendices 1 & 2)

This study used a mixed-method research design with both closed and open-ended questions. The target population consisted of listeners of Sifa FM in two locations in the Marsabit and Voi regions. Random sampling was used to select 100 participants from each location and surveys were pretested among the listeners of Sifa FM in Lamu.

## **4.0 Results**

### **Participants Socio-demographic Information**

Of the 200 participants surveyed, 64% were males and 36% were females. The married participants were 39%, single 55%, widowed 3%, and divorced and separated participants were 3%, respectively. On average, each family had four people who listened to Sifa FM regularly. Their education levels were: primary 19%, secondary 43%, and post-secondary education (college and university) 38% respectively. Their employment levels were: 35% employed, 35% unemployed, 22% casuals and 8% students. 93% of the participants listened to Sifa FM and only 7% did not. On average, participants listened to Sifa FM three times a week.

## **Content Analysis**

A content analysis on the open-ended questions was carried out to establish the purpose, origin, and effects of Covid-19 and how the virus was spreading; as well as to find out the role that Sifa FM was playing as a source of information about Covid-19.

### **Purpose, Origin and Effects of Covid-19**

Participants were asked whether they knew the origin, purpose and effects of Covid-19. 65% of participants suggested that the origin was China, 10% from white people or European countries, 11% from animals, 11% from a lab and 3% from other sources such as God or just a mere fever. The pandemic had different purposes. Out of 195 mentions, participants were of the opinion that it was for the following reasons: 18% economic reasons - a business war; 27% political reasons -- to allow China to improve its political standing and wage a political war against America and Europe; 35% population control; 18% had no idea; and 8% to cause sickness and limit people's movement.

### **How Covid-19 was Spreading**

Participants were asked how the Covid-19 pandemic was spreading. Out of the 341 mentions, 61% said that it was spreading due to failure to adhere to Covid-19 prevention protocols; 28% stated the cause to be from sneezing and coughing and noted that it was airborne; and 11% were of the opinion that it was due to exposure to an infected person. This showed that the participants were aware that Covid-19 protocols were not enough as the illness was airborne and could be spread through sneezing, coughing and being close to infected people in their homes.

### **The extent to which Sifa FM Participated in Disseminating Information on Covid-19**

The participants' main source of Covid-19 information were: radio (45%), television 42%, others (online, government, posters, etc.) 13%. Sifa FM emphasized the observance of Covid-19 protocols such as wearing masks, using sanitizers, keeping WHO and Ministry of Health (MOH) guidelines and explaining the nature of the pandemic clearly to the community. They used various methods including songs, radio drama, advertisements, the local languages, Covid-19 updates, talk shows, roadshows, poetry, scriptures and seminars.

### **Preventive health behaviour messages on Covid-19 that are disseminated by Sifa FM**

Sifa FM disseminated various preventive health behaviour messages on Covid-19 since the first case was reported in Kenya. The messages aimed to provide information about the



disease, create awareness about the signs and symptoms to look out for, Covid-19 preventive measures, the economic impact of Covid-19 on the community, a message of hope and encouragement for the community, and ways to observe Covid-19 protocols. The messages also aimed to counter any misinformation that was being propagated within the community by providing factual information about the pandemic. In some cases, health experts were invited to the radio stations to speak about Covid-19 while the stations also relayed messages from the Ministry of Health (MOH). Sifa FM also presented the risks involved when one contracted the illness and encouraged the community to go for testing in case they noticed any symptoms. They emphasized on the need to observe Covid-19 protocols such as avoiding crowds, washing hands with soap and water and wearing of masks.

### **The Impact of the Covid-19 Messages on the Audience**

The community members who responded to the questionnaires noted that through the radio messages, they learnt how to adapt to the new normal by following the health guidelines such as maintaining social distance, putting on masks and using sanitizers regularly. They also had to wash their hands regularly and visit the medical centers to check on their health status. Additionally, they tried to abstain from hugging, attending huge gatherings in worship centres and mingling with many people.

Through the messages aired on Sifa FM, the community members also accepted to be vaccinated against Covid-19 and observed the Ministry of Health (MOH) guidelines against travelling in crowded public transport vehicles. The number of passengers in these vehicles was reduced to ensure there was social distancing. Others noted that they were no longer shaking hands as a form of greeting while others noted that they avoided leaving the house unless it was very necessary. Some of the respondents noted that due to the messages on Covid-19, they had installed hand-washing facilities at their business premises to ensure that the customers washed their hands before getting in.

## **5.0 Discussion and Conclusions**

The feedback from the audience in reference to the Health Belief Model constructs

### **a) Related to the risks they faced from the pandemic (perceived susceptibility):**

The community's concerns were mainly related to the facts about the Covid-19 disease, fear of contracting Covid-19 and concerns about what the government was doing to ensure that

they were being safeguarded against infection. Table 2 demonstrates the participant’s susceptibility of contracting Covid-19. Responses showed there were 50% mentions of low and high chances of getting the virus, respectively. They also wanted to know what the government was doing to ensure that there was adequate provision of water and that the drugs required to fight the disease and the protective preventive equipment were available at the hospitals. They were also concerned about having information about adequate hospital personnel and especially the doctors and whether there were adequate ICU facilities in their hospitals.

**Table 2: Participants susceptibility of contracting Covid-19**

| <b>Category</b>                        | <b>% of Mentions</b> |
|--|----------------------|
| Low chances of getting Covid-19 virus  | 50                   |
| High chances of getting Covid-19 virus | 50                   |

**b) Related to how severe they thought the illness was (perceived severity):**

Some community members ignored the seriousness of the disease and noted that they just needed to take traditional herbs rather than contemporary medicine in case they got infected.

**c) Related to the benefits they perceived by adhering to government guidelines (perceived benefits):**

Some of the respondents heeded the call to get vaccinated and even went for the vaccination while others were still skeptical about the side effects of the vaccine and therefore did not go.

**d) Related to the barriers they thought they faced in meeting these guidelines (perceived barriers):**

Some of the respondents believed that Covid-19 was a normal disease and that they would easily be able to overcome it. They believed that they had very strong immunity against the disease. Some of the information that was propagated within the community was misleading such as saying that the disease was only for the white people and not for the black people while some believed that they just needed to use traditional herbs rather than contemporary medicine in case they got infected. Others believed that Covid-19 was a manufactured illness, while others believed that Covid-19 was as a result of spiritual issues and that it was a punishment from God and a sign of the end of the world. Others believed that it was a way of reducing the population of the world and especially that of Africans due to our

poor health infrastructure. The messages from Sifa FM helped to provide factual information about the disease and to counter some of the misinformation that they were receiving.

## 6.0 Conclusion

In this study, increased perceived susceptibility, perceived severity and perceived benefits were an indication of higher practice scores. From the results, it was also evident that other sources of information such as social media and the internet played a significant role in shaping risk perception in the community. The results also showed that emphasis on risk perception and efficacy beliefs prevention messages was effective in causing people to practice preventive behaviours.

Overall, it is evident from the data that public health messaging through community radio and specifically Sifa FM was effective in slowing down the spread of Covid-19 as the residents were able to receive the information they needed to keep themselves safe. The Health Belief Model, which is a health behaviour change theory, has effectively been used in this study to show how people changed their behaviour based on the public health messages that they received. Public health messaging that increased individuals' perceived susceptibility to contracting Covid-19, that emphasized the seriousness of the condition, and amplified the perceived benefits of observing the Covid-19 protocols relative to the risks, were key to reducing the spread of the virus.

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