Is community radio an effective tool for health education?
Perceptions of stakeholders of a community radio project in north coastal Andhra Pradesh

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ABSTRACT

Background: Unlike commercial radio, community radio works with local communities and helps in catering their specific needs and necessities and works as an innovative tool in bringing social change by using the participation of common man from the community in the program. Community radio stations are operated, owned, and influenced by the communities they serve. The objectives of the study were to describe the background information of the community radio services and to assess the perceptions of the rural community about the effectiveness of community radio and challenges in delivering its services.

Methods: This study was designed on mixed method approach. Knowledge about health was assessed through a cross-sectional study. Perceptions about the effectiveness of community radio were gathered through focus group discussions. In-depth interviews with service providers obtained limitations and constraints that hinder the effectiveness. Villages surrounding an engineering college in Srikakulam district of north coastal Andhra Pradesh which is being provided community radio services by the institute. People in the selected villages who were provided community radio services and the staff of the engineering college involved in the program.

Results: Preliminary results indicate that the beneficiaries found that programmes on care during pregnancy and delivery related issues were most beneficial. Drop out of trained community personnel to provide the health education was a major drawback as per the service providers.

Conclusions: This beneficial approach to community needs support from the Government to implement it in every remote corner of our country.

Keywords: Community radio, Perceptions, Innovative tool, Health education, North coastal Andhra Pradesh

INTRODUCTION

India aspires to be a superpower by 2030. Lack of quality healthcare services is a concern for the majority of Indians, triggered by the deficiency in the number of doctors catering to public health needs and the poor state of health care education in the country.¹

Shortage of health care professionals and the focus on doctors as the mainstay of the public health system which is doing more harm than good. Health care professionals need ample support in technology to reach remote communities.

Community radio is a form of public service broadcasting. Unlike the conventional broadcasting its approach is different as its specific focus is to make its...
India has 18 officially recognised languages and a total of 1652 mother tongues in a country. Community radio is easily accessible mass media which provide significant information through its programmes and guarantees nearest to the community folks.³

In 2003, the Government of India released the first set of community radio guidelines. However, restricted eligibility to educational institutions.⁴ The Union Cabinet finally approved in 2006, permitting non-government organisations, educational, and agricultural institutions to own and operate community radio stations. Ministry of Information and Broadcasting (MIB) has introduced the community radio support scheme, under the 12th five year plan which provide financial support to new and existing community radio stations.⁴ A study by Likhi concludes that it would be extraordinarily worthy of analysing the extent and impact of coverage by operational community radio stations of vulnerable sections of society like regular castes, regular tribes, minorities, ladies and particularly youngsters. Thus, the fourth governance challenge would be to spot regions and themes wherever additional energies are to be channelised to inspire non-profit civil society candidates to determine community radio stations.³

Srikakulam is a backward district located in north coastal Andhra Pradesh. The area is most of the rural population and with limited amenities. Community radio services were provided to 78 villages through a local educational institute namely GMR Institute of Technology (GMRIT) covering 15 to 20 km aerial radius from its transmitting station (GMRIT, Rajam). The services focus on the issues related to education, employment, agriculture and health by airing a relevant program. GMR radio creates an opportunity to safeguard the regional heritage by promoting the talents of local artists. It also enables the authorities to reach the community and resolve the issues of concern.⁶

Currently, this is a novel approach and very few studies have been done. The present study was undertaken to know the role of community radio as a useful tool to improve the life skills and health of women and men in rural areas.

**Objectives**

The objectives of the study were to describe the background information of the community radio services and to assess the perceptions of the rural community about the effectiveness of community radio and challenges in delivering its services.

**METHODS**

**Study design**

Mixed method approach using both quantitative (survey) and qualitative (focus group discussion and in-depth interviews) methods. Knowledge about community radio, community needs and health-seeking behaviour of the villagers was assessed through an observational descriptive cross-sectional study. Perceptions about effectiveness and constraints of community radio were gathered through focus group discussions and in-depth interviews with the stakeholders and service providers.

**Study period**

Study was done from December 2017 to January 2018.

**Study setting and subjects**

People in the selected villages surrounding GMRIT in Srikakulam district of north coastal Andhra Pradesh who are being provided community radio services by the institute.

**Sample size**

For quantitative method, 100 households were considered as there is no previous data available assuming 50% of population listening to community radio with the absolute precision of 10%, minimum sample size obtained by using the formula $4pq/l^2$ was 97, so we have considered 100 for the present study. For qualitative data, information was collected until data saturation.

**Sampling technique**

Simple random sampling was applied to select the villages, and systematic sampling technique was used to identify 100 households in the areas as mentioned above and one member from each household above 15 years was interviewed for the survey.

**Data collection**

Data is collected from the villagers by using pre-tested semi-structured questionnaire. Two focus group discussions were conducted with ten members in each group from the village using a field guide. The discussion was continued for 30 min, and their views were recorded by using a recorder. Total of eight in-depth interviews was conducted by one to one interaction. Three with the villagers and two with ASHA and Anganwadi”s of the village and remaining with the community radio jockey,
the community ward member and the Managing Director, GMRIT.

**Data analysis**

Proportions and Percentages were used to analyse the quantitative data. For qualitative data manual coding was done, and later themes were derived. The audio recorded discussion was transcribed into a written document and read and re-read forth and back, and content analysis was done by generating codes and categories. Based on the codes generated from the focus group discussion and interviews initial categories were made and then Data triangulation is done with the information from quantitative data and finally, themes were generated by using Braun and Clarke’s Six Phases of Thematic Analysis.

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**Codes generated in focus group discussion and in-depth interviews**

Helpful, daily needs, useful, local language, idea generation, tips, easy method, participation, better understanding, community needs, motivating, poor signal, interactive sessions, liked it, loved it, good program, signal disturbance, innovation, nice program, change in perception, importance, locals voice, radio listening clubs, needs of the community, increase in antenatal check-ups, talent platform, increased utilisation, increased awareness, Anganwadi services, dropouts, inadequate handsets, lack of support, lack of training.

**Table 1: Example of the coding process.**

<table>
<thead>
<tr>
<th>Selected codes</th>
<th>Categories</th>
<th>Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local language, participation, motivating, idea generation, change in opinions</td>
<td>Better understanding</td>
<td>Tool for empowerment</td>
</tr>
</tbody>
</table>

Themes generated by qualitative analysis perceived as good program, a tool of empowerment and constraints.

**RESULTS**

Presently GMR radio is broadcasting in 90.4 MHz for 7 hours between 6 am to 9.30 am and 5.30 pm to 9 pm with society needed content. Health-related programs and women empowerment programs were broadcasted for 60 min/day each in two sessions morning and evening. 68% of the audience are listening to community radio in the morning hours, and 32% are listening in the evening hours.

**Table 2: Time table of community radio.**

<table>
<thead>
<tr>
<th>Morning programmes</th>
<th>Evening programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neti sukti</td>
<td>Health tips</td>
</tr>
<tr>
<td>Eeroju mahanubavulu</td>
<td>Idi meeku telusa</td>
</tr>
<tr>
<td>Radio vidya</td>
<td>Mahila meluko (7:30 to 8:00 pm)</td>
</tr>
<tr>
<td>Mahila meluko (7:30 to 8:00 am)</td>
<td>Vantalu</td>
</tr>
<tr>
<td>Health tips</td>
<td>Chitti poti kathalu</td>
</tr>
<tr>
<td>Speak in english</td>
<td>Janapada geetalu</td>
</tr>
<tr>
<td>Today’s technology</td>
<td>Katha seershika</td>
</tr>
<tr>
<td></td>
<td>Rangastalam</td>
</tr>
<tr>
<td></td>
<td>Public awareness jingles</td>
</tr>
</tbody>
</table>

**Perceptions of community**

**Quantitative results**

Out of 100 people who responded to the questionnaire, 45 are males, and 55 are females. All of them belong to the lower socio-economic class as per their holding of white ration cards. Half of the respondents to community radio are homemakers (45%). More than 25% of the population still visit faith healers, alternate healers and follow home-based remedy. Regarding the environment, most of the population get their drinking water from a common municipal tap, and most of the households in the community do not have their toilets at home.

**Table 2: Background information about the respondents.**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number</th>
<th>Percentage (%)</th>
<th>Mean age in years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>45</td>
<td>45</td>
<td>36±8</td>
</tr>
<tr>
<td>Female</td>
<td>55</td>
<td>55</td>
<td>33±10</td>
</tr>
<tr>
<td>Total no of households</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

**Table 3: Distribution of respondents by education qualification.**

<table>
<thead>
<tr>
<th>Educational qualification</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>24</td>
<td>24.0</td>
</tr>
<tr>
<td>School up to 5 to 10 years (class 1 to 5)</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>School up to 11 to 14 years (class 6 to 9)</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>SSC or HSC</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Under graduate</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Graduate/post graduate</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Technical (Diploma/IT)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
The survey reveals that 75% of the villagers are aware of the community radio services in their community, but only 39% of the population listen to community radio. Among the listeners, 87% of the population listen to radio through mobile phones, and only 13% of the population are listening through the radio sets at home.

**Figure 1: Utilisation of community radio services (n=100).**

Among the listeners, most people (68%) listen to the radio between 6 am, and 8 am, and half the population (55%) like to listen to the programme in a group with other listeners.

80% of the listeners felt the programmes of community radio very useful in increasing their understanding of the health as they are motivated to attend the antenatal clinics and immunisation clinics. Out of all the programmes delivered by community radio, villagers felt programmes about care during pregnancy, food and nutrition were most useful, followed by interactive sessions about employment and empowerment.

**Figure 2: Mode of listening (n=39).**

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**Figure 3: Community radio programmes perceived as most useful by the villagers (n=39).**

**Qualitative results**

Two focus group discussions were conducted involving villagers with ten members in each group one with all females and another with males of the village. After data triangulation of FGD'S and interviews with quantitative data, the following themes were obtained.

**Perceived as good program**

Health advises regarding care during pregnancy, and newborn care was delivered in both morning and evening sessions of community radio. Information regarding local government services/facilities and schemes for better health of mothers and adolescent girls were communicated to them by the local health workers in their local language.

“Even though I am uneducated now I have a better understanding about preventive measures during pregnancy, lactation and importance of immunisation as community radio programmes were in our local language” told by Anjali Devi (rural women of Harijan veedi).

**Figure 4: Focus group discussion of ten women of Rajam village along with Notetaker, Recorder, Moderator and radio jockey.**

“There is a change in opinions of people after this good program as the immunisation coverage is increased and the number of people utilising the antenatal services has been increased” said by Saraswati (health worker female).
A tool of empowerment

Local talents of rural communities like local folk poetry, singing etc. are also encouraged to keep the programs more alive and more local.

“I feel like I can call the radio station and communicate with the whole community directly about the benefits we are providing regarding care during pregnancy and food and Nutrition.” said by Sri Lakshmi (ASHA worker).

People were given a choice to select the type of program they want rather than having them prescribed by the commercial producers. Almost a quarter of them participated in some form of a community radio program and women are given in the program.

“Programmes for the month are framed based on the suggestions and needs of the community which are collected from group meetings held in the village” – Geetha (community radio jockey and villager)

“As my neighbour herself participating in the community radio programmes related to nutrition and importance of balanced diet in community radio, I find it interesting and motivating” Seetha Mahalakshmi (a village housewife) told.

The health information like essential measures and precautions to be taken to ward off Communicable infectious diseases and non-communicable diseases was delivered at monthly meetings of the village by health professionals.

“During evening gatherings, we all friends collectively listen to community radio station programmes related to diabetes and discuss with each other at our Radio Listening Clubs” Krishna (an elderly villager) said.

Community radio is receiving good support from the government and is well-maintained by the community.

“Community radio started with this idea of VELUGU program, Annual reports of community radio received support from government and very helpful in their community.”- Director, GMRIT.

Constraints to community radio

Lack of clear radio signal in some areas, which depends on the number of radio transmitters for the station is a point of constraint for using community radio among villagers, and most of them are also not having adequate radio handsets to listen.

“Most of the people are liking the benefit they are getting from good programmes of community radio, but some areas are not receiving the clear and audible signal” Eswar Rao (Ward member) told.

Drop out of the community personnel who are trained to provide health education via radio programmes was a major drawback for the service providers.

“Due to shifting of houses and migration, most of the trained community members are dropping out which is a problem for smooth conduction of community radio”- Director, GMRIT.

DISCUSSION

Nowadays, health is given the highest priority among the rural population due to the rise in non-communicable diseases to significant levels. Media has also taken steps towards improving the quality of life in the unreached rural population. Community radio is being used as a tool to impart knowledge about various NCD’s and facilitate their well-being by providing appropriate information on it, hoping to bring behavioural changes among them. Very few studies of community-based health education through community radio are available to compare with our results.

In the present study, The GMRIT community radio focussed on the social mobilisation of men and women in the remote communities by increasing their participation in the content they are hearing. They have given a decision making power to choose their programs on their felt needs which is similar to other successful community radios in the country like PSG Community Radio Of Coimbatore etc.10

In the present study, women are playing a key role in delivering the information, which is a very important factor in motivating the community at large by programmes like “Mahila meluko” in the radio. These findings are in line with other studies like Nirmala (2015), in which women have started to reflect on their abilities and aspirations on other women’s lives through media and at an interpersonal level.11

A study by Sterling et al points out that community radio project seek to advance women in rural regions by providing them with a mechanism to amplify and publicise their distinctive considerations, knowledge, and needs. This study claims community radio as the “voice of the voiceless”.12

This approach could be a useful resource for poor NGO’S working in rural parts of developing countries as it allows marginalised communities to express their views often ignored by mainstream media.13

A study by Bandelli et al said that women’s communication needs in community radio coverage areas should be carefully investigated and compared with information arising from the content analysis of radio programmes. Moreover, women’s communication desires ought to be deeply explored, not solely by researchers,
but also by NGO initiators before the establishment of community radio.\textsuperscript{14} Balan et al suggests that community radio should feature a range of attributes that makes it an efficient tool in promoting women’s participation in decision-making processes and governance structures.\textsuperscript{15}

Community radio is about developing a community-a neighbourhood cluster of villages. Despite the huge gap that exists between policy and ground-level realities in the various health programmes, the community radio can grow within the future.

**CONCLUSION**

The community radio services of the GMRIT in the rural population of RAJAM are well received but not used to the fullest extent. There is a scope for increasing the reach by overcoming hindrances such as no availability of network at some places, inadequate radio handsets and Non-adherence of trained radio jockeys. The involvement of local women in community radio activities is playing a key role in the success of the program and emphasises its usefulness in increasing villager's participation in health programs.

**Recommendations**

There is a need to increase the number of radio transmitters with the support from Government which may further increase the utilisation by improving the radio signal. As still there is scope to increase the participation of villagers, conducting training workshops will help in increasing their participation in community radio programmes and counter the dropouts. Moreover, by involving community health workers like Anganwadi and ASHA’s to inform and assure people of the options they have by using community radios, would be very beneficial.

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**Conflict of interest:** None declared

**Ethical approval:** The study was approved by the Institutional Ethics Committee

**REFERENCES**