

## Original Article

## IDENTIFYING EFFECTIVE COMMUNICATION CHANNELS IN A RURAL COMMUNITY: A FIELD REPORT FROM SOUTH INDIA

Rajeswari Ramachandran, K Jaggarajamma, M Muniyandi and Rani Balasubramanian

*(Original received on 30.5.2006. Revised version on 30.6.2006. Accepted on 11.7.2006)***Summary****Background:** There is scarcity of information on communication channels in rural areas where about 38% of people are illiterate.**Objective:** To identify the channels of communication available in rural areas by interviewing key informants.**Method:** This study was conducted in 51 villages of Ellapuram block, Tiruvallur district, Tamil Nadu in the year 2004. Key informants selected from the villages were interviewed by a Medical Social Worker. The questionnaire included information on modes of communication channels, availability of markets, public facilities, and local associations.**Result:** The study block included 9893 households covering a population of 39255. Their main occupation was agriculture (86%). Electricity was available in all the villages. More than 80% of the villagers had community TV/cable connections, >50% of the villages had cinema star fan associations, mahila mandals, youth clubs, self-help groups, anganwadi centres and ration shops. The main source of communication as per interview was television (100%), wall-posters (55%); publicity through panchayat office meetings (53%) and dandora or beat of drums(43%).**Conclusion:** Main communication channels, commonly used to disseminate information were TV and wall posters. More than 50% of villages had local associations which can be used for effective communication. This information is vital for disseminating important information on public health programmes and educating the rural community. [*Indian J Tuberc 2006; 53:206-211*]**Key words:** Communication channels, Rural community, IEC, India

## INTRODUCTION

TB control programme is a felt-need oriented programme as more than 80% people with chest symptoms have been reported to seek relief of symptoms on their own<sup>1</sup>. Poor awareness on all aspects of TB, including symptoms suggestive of TB, availability of free diagnosis and treatment facilities in the community might adversely affect the programme performance. Earlier studies have shown that TB awareness was not up to the expectations due to poor literacy rate or lack of availability of effective communication channels resulting in improper health seeking behaviour and treatment compliance<sup>2-5</sup>. In a study conducted in our centre, it was observed that 29% of patients had delayed seeking care for more than one month and 40% of them attributed the delay to their lack of awareness about TB<sup>6</sup>. Even in the Joint TB

programme review conducted in the year 2000, it was observed that paucity of knowledge on TB and TB control programmes prevailed even among the grass-root level health workers, despite the presence of posters and pamphlets in abundance to promote Revised National Tuberculosis Control Programme (RNTCP)<sup>7</sup>. All these findings suggest that there is a need to improve awareness of chest symptoms suggestive of TB including availability of free diagnostic and treatment services in the community, especially in rural areas to achieve effective TB control.

Priority has been given to Information, Education and Communication (IEC) in creating awareness about the National Tuberculosis Control Programme. Under RNTCP Phase I, the IEC achievements at the national level were production of 7 TV spots, 3 radio spots and development of

Tuberculosis Research Centre, Chennai

**Correspondence:** Dr Rajeswari Ramachandran, Deputy Director (Senior Grade), Tuberculosis Research Centre (ICMR), Mayor V R Ramanathan Road, Chetput, Chennai, India 600 031; Tel: 91 (44) 28369613; Fax: 91 (44) 28362528; Email: rajerama@yahoo.com

standardized messages. The main objectives in Phase II of RNTCP with respect to IEC, will be to have a detailed planning, to identify the appropriate choice of communication channels in different areas so that dissemination of information on TB can be done through appropriate channels for wider reach of information in respective areas<sup>8</sup>.

With this background, we initiated a study in Thiruvallur district which consisted of predominantly rural population. The main objective of this study is to identify communication channels that are available in a rural community and also the channels that are utilised to get the information by different segment of the population.

## METHODOLOGY

### Study area

The study was undertaken during 2004, in one of the randomly selected Ellapuram panchayat union (block) of Velliyur tuberculosis unit, Tiruvallur district, Tamil Nadu, south India.

### Study population

The study block included 39,255 population in 51 villages. Key informants from each village were selected. One key informant from each village who was able to give the information about available communication channels selected by the villagers formed the study population. They were either panchayat leader or village teacher or post master or any other community leader identified by the villagers.

### Data collection and management

All the key informants were interviewed in the villages by a medical social worker, in a semi-structured pre-coded schedule to collect the information. The following information were collected: major occupation of the villagers, availability of transport, education, health facilities, electricity and other services like mills, societies, markets, ration shops, social groups and places of worship. In addition, we also collected detailed information on the communication facilities available

in the villages, such as announcements by Dandora (beat of drums/mike, communication facilities such as television, radio, newspaper, etc. All the informants were specifically asked which communication channel was utilized maximum by them for collecting new information. Data was entered, checked for errors and analysed using the SPSS (8.0 version SPSS Inc, Chicago, IL) package.

## RESULTS

The study block included 51 villages, 9,893 households and 39,255 population. Electricity was available in all the villages. Main occupation was agriculture in (86%) of villages and the remaining included weaving, self employment, etc.

Table 1 describes the education facilities available in this block. In about one fourth 13 (25%) villages, no educational facilities were available. While half of the villagers 26 under study had primary schools, 10 (20%) middle schools and 2 (4%)

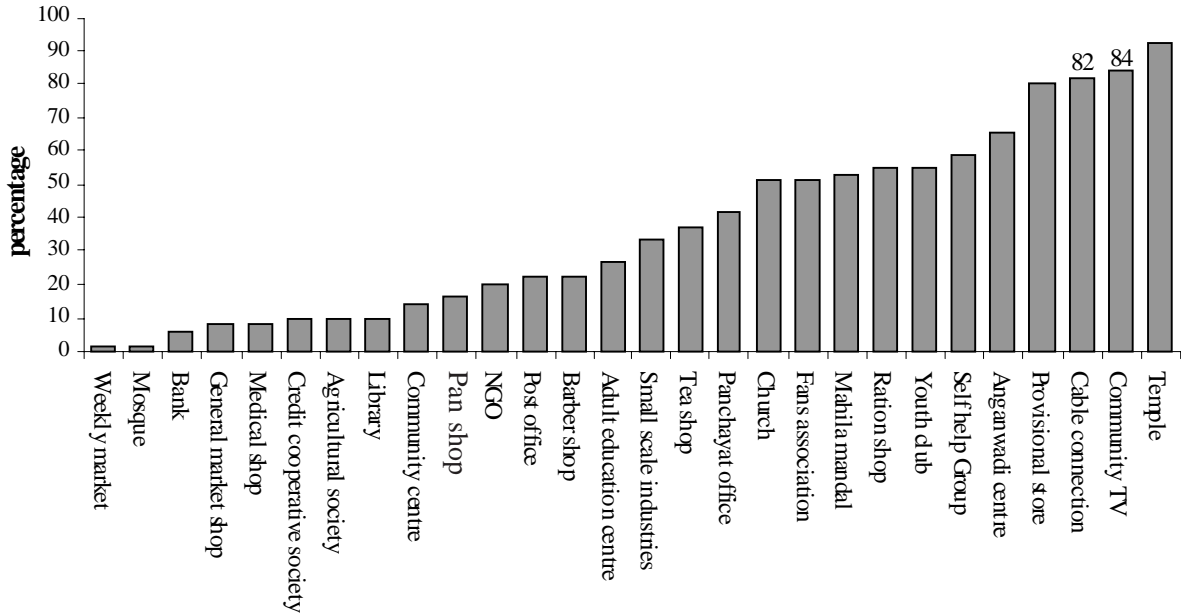
**Table 1:** Education and health facilities available in villages (n=51) under study

Facilities	No	%
<b>Education</b>		
Nil	13	25
Primary school	26	51
Middle school	10	20
Secondary school	2	4
<b>Health centre</b>		
Nil	36	71
Sub centre	9	18
Private clinic	6	12
Others	4	8
<b>Health providers</b>		
Village health guide	1	2
Traditional healer	1	2
Mobile health unit	4	8
Private doctor	7	14
Village health nurse	49	96

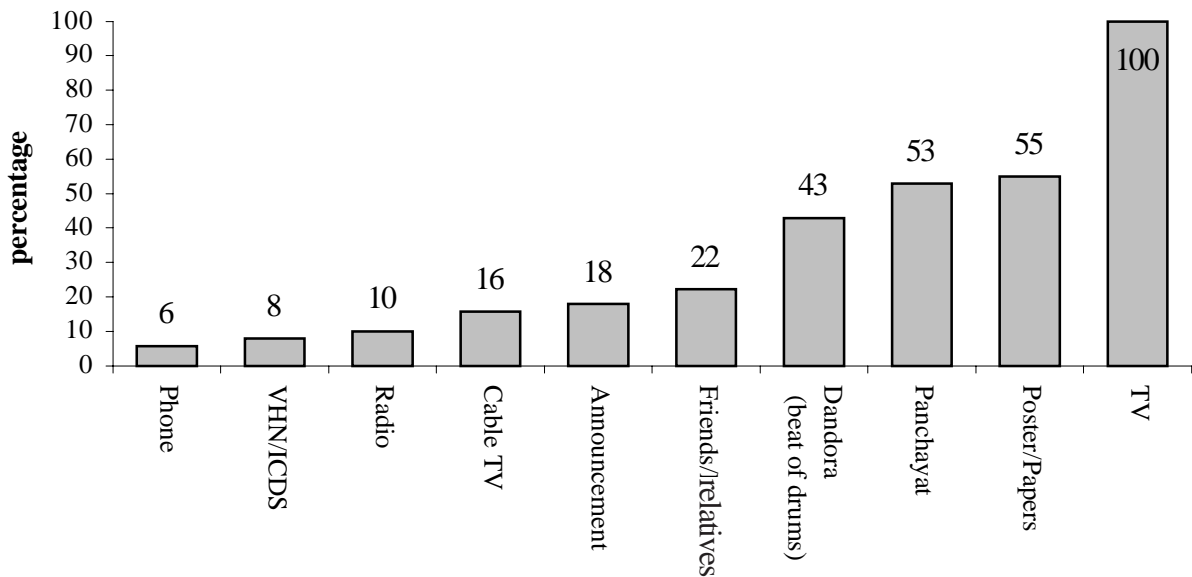
secondary schools.

There were no health facilities (private or government) in 36 (71%) villages and 9 (18%) had government sub-centres, and private clinics in 6

(12%). A few villages had more than one type of health facility. Other health facilities such as traditional healers, non-allopaths, etc, were available in 4 (8%). The health care providers were village health nurses in 49 (96%) of villages and private doctors in 7 (14%) villages.



**Fig 1:** Percentage of important information areas where the villages under study collated information



**Fig 2:** Communication channels available in the villages (n 51) for information

Figure 1 explains the other facilities in this block. More than 50% of the villages had cinema stars fan associations, mahila mandals, youth clubs, self-help groups, anganwadi centres and ration shops. More than 80% of villages had community TV and cable connection, separate place of worship and general provision stores.

The main communication channels in this area are described in Figure 2. In all villages, the main source of any information was through television. Other available sources were: wall posters in 28 (55%); publicity by panchayat office meetings in 27 (53%); dandora in 22 (43%); friends and relatives in 11 (22%); announcement by loud speakers in 9 (18%); cable TV in 8 (16%); radio in 5 (10%) and through health workers like VHN/ICDS workers in 4 (8%).

## DISCUSSION

The salient finding of this study was that more than 80% of the villages had community TV and cable connections in the study area. Also this study clearly shows that in rural south India, television (100%) is the main source of information and this channel of communication may meet the challenge of reaching the "interior pockets" of rural India. This is contrary to that expressed in an earlier report that for rural populations there is a need to have separate communication plans<sup>9</sup>. In the current series we also found that 53% of villagers were getting information through local panchayats, 55% through wall posters, 43% through dandora and 18% through announcement by loud speakers. Therefore, multiple approaches are likely to achieve the goals of any health communication programme, especially in rural areas with limited availability of communication channels, and this information will be useful to RNTCP for its Phase II expansion<sup>9</sup>.

Among the different types of mass media available in rural areas, television has the greatest reach. However, exposure to mass media like television varies from place to place and from time to time. National Family Health Survey-II conducted

by International Institute for Population Sciences Mumbai described that regular exposure to television was the highest in Delhi (90%) and the lowest in Bihar (17%) in the year 1998-99<sup>10</sup>. In an earlier study from our centre in the year 1995, among urban educated persons the source of information on tuberculosis appeared to be mainly from books, magazines and television (65%)<sup>2</sup>. However, it appears that within a decade, more than 80% of rural villages have access to television and all information including health were through mass media as shown in the present study. In RNTCP phase I, TV spots on TB were telecast in regional channels and cable networks generated awareness about TB. This strategy continues to be an important component of advocacy and social mobilization to create demand for services and increase utilisation of services in phase II as well. The focus in RNTCP phase II is on a combination of centrally produced core messages with appropriate state and district specific strategies, with local innovations to reach all possible groups through the most appropriate channels, material and activities.

In the current series, publicity at panchayat meetings complemented the messages given in television. An earlier report also suggested that the mass media helps in generating positive word-of-mouth opinion which can be an extremely powerful medium<sup>9</sup>. Earlier, programme experiences have also shown that the success was most apparent where the mass media complemented the messages given by community members. Many health programmes have also made use of informal as well formal community involvement to disseminate messages aimed at motivating community members. The mass media can create a base and other activities such as interpersonal communication are necessary to actualise the gains of awareness created through the mass media.

Yet another mode of effective communication channels observed in this study was use of wall posters to spread any message in the community. This is in conformity to an earlier study done by our centre in Madurai city where among various sources tried including radio channel, street plays, wall posters, etc., the main source for

communication was wall posters<sup>11</sup>.

Current study highlights availability of many associations like cine stars association, mahila mandals, etc., in these villages. All matters, including health programmes, are discussed in these associations. Earlier, studies also had shown that a variety of community members including students, village leaders, school teachers, community health workers, religious leaders, trade unions and women's organizations were used to raise awareness of the signs and symptoms of a number of health programmes through verbal communication (leprosy, diarrhoea, malaria)<sup>12</sup>. Therefore, a good programme like RNTCP should aim to tap all these resources in creating awareness on TB, especially in the rural community.

#### Limitations of the study

This study needs to be interpreted in the light of certain limitations: Findings of this study represent about 40,000 population residing in 51 villages in south India. Extrapolation of these results to the entire country may not be valid considering the existence of varying cultural, geographical variations observed within the country. According to the National Family Health Survey conducted in the year 1998-99 the availability of electricity in India was 81.3% and in Tamil Nadu villages 98.6%<sup>10</sup>. For the present study, data was collected at one time point from key informants (an acceptable qualitative research method). One of the disadvantages of this method is that the biases and impressions of key informants are likely to influence the information collected. This is a limitation of the present study.

#### CONCLUSIONS

**This study highlights the existence of multiple communication channels, including TV facility in the rural villages of Tamil Nadu. The most important channels that are being commonly used to get day to day information are mass media /television, wall posters, meetings at panchayat office and through dandora (beat of drums). These channels can be utilised for spreading any health messages**

**effectively. In addition, most of the villages have local associations and place of worship where the community meets and share information. Policy makers and programme managers should tap all these resources to educate the community, especially the rural community.**

#### ACKNOWLEDGMENTS

The authors are grateful for the assistance and cooperation of the State Tuberculosis Officers of the Tamil Nadu Government, the Joint Director of Health, the Deputy Director Tuberculosis, the Deputy Director Health Services and all the medical and para-medical staff, including treatment volunteers who participated in this study. The authors are grateful to Dr. P.R. Narayanan, Director, for encouraging us to do this study. We are also thankful to Dr. T. Santha Devi, Consultant, for helpful suggestions in correcting the draft. We thank all the key informants who have participated in giving interviews. This report was funded in part by a grant from the United States Agency for International Development provided through the World Health Organization.

#### REFERENCES

1. World Health Organization. The global plan to stop tuberculosis. World Health Organization, Geneva. CDS/STB/2001.16
2. Rajeswari Ramachandran, Diwakara AM, Sudha Ganapathy, Sudarsanam NM, Rajaram K, Prabhakar R. Tuberculosis awareness among educated public in two cities in Tamilnadu. *Lung India* 1995; **13(3&4)**: 108-113.
3. Singh MM, Bano T, Pagare D, Sharma N, Devi R, Mehra M. Knowledge and attitude towards tuberculosis in a slum community of Delhi. *J Commun Dis* 2002; **34(3)**: 203-14.
4. K Geetakrishnan, KP Pappu, K Roychowdhury. A study on knowledge and attitude towards tuberculosis in a rural area of west Bengal. *Indian J Tuberc* 1988; **35**: 83-89.
5. Neeta Singla, PP Sharma, R Singla, RC Jain. Survey of knowledge, attitude and practices for tuberculosis among general practitioners in Delhi, India. *Int J Tuberc Lung Dis* 1998; **2(5)**: 384-389.
6. Rajeswari, R., V. Chandrasekaran, Suhadev M, Sivasubramaniam S, Sudha G, Renu G. Factors associated with patient and health system delays in the diagnosis of tuberculosis in South India. *Int J Tuberc Lung Dis* 2002, **6(9)**: 789-795.

7. World Health Organization. Joint Tuberculosis Programme Review India. World Health Organization, Regional Office for South East Asia, New Delhi. SEA-TB-224/2000 (WHO Project No: ICU TUB 030).
8. Central TB Division. Directorate of General Health Services Ministry of Health and Family Welfare, Nirman Bhavan, New Delhi 110 011. <http://www.tbcindia.org> (Accessed in April 2006)
9. SP Agarwal, Saroj Dhingra, LS Chauhan. The role of IEC in the RNTCP. Chapter on Tuberculosis Control in India. Edited by: SP Agarwal, LS Chauhan. Directorate of General Health Services Ministry of Health and Family Welfare 2005, Nirman Bhavan, New Delhi.
10. International Institute for Population Sciences National Family Health Survey-II Mumbai 1998-99.
11. Hadley M, D Maher. Community involvement in tuberculosis control: lessons from other health care programmes. *Int J Tuberc Lung Dis* 2000; 4(5): 401-408.
12. Tuberculosis Research Centre (ICMR), Chennai. A study on feasibility of involving male student volunteers in case holding in urban tuberculosis programme. (unpublished-1997).

---

Dr. L.S. Chauhan, Deputy Director General (TB) and Programme Manager for the Revised National Tuberculosis Control Programme (RNTCP), in the Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India, New Delhi, has been selected by the “Stop TB Partnership” to share this year’s Stop TB Partnership Kochon Prize for achievements in the arena of TB control. The 2006 Stop TB Partnership Kochon Prize is awarded for great achievements in combating Tuberculosis, contributing to the formulation and implementation of anti-tuberculosis programmes or for contributions to education and training for the prevention of Tuberculosis. The award will be given to him during the International Union Against Tuberculosis and Lung Disease (IUATLD) Conference to be held in Paris from 31<sup>st</sup> October to 4<sup>th</sup> November, 2006.