RADIO CAMPAIGNS ON REPRODUCTIVE AND CHILD HEALTH IN ANDHRA PRADESH – EMERGING APPROACHES (Abstract)

Health Communication - Importance and need

Communication plays an important role in addressing development issues as it involves bringing change in knowledge, attitudes and practices through information dissemination. Health is a major development issue and health issues which are preventive in nature need communication support. There are considerable differences among the health concerns between developing and developed countries. Health issues in developing countries are mostly influenced by factors such as illiteracy, poverty, a largely rural population with low access to health care facilities and other adverse socio-cultural factors necessitating more emphasis on preventive health care. Health education and communication occupies a major role in preventive health care and all agencies involved in health communication have a responsibility on par with the service providers in meeting the health challenges.

Some of the factors influencing the availability, accessibility and utilization of preventive health care services in any developing country are, the status of public health in that country, programmes for population stabilization and reproductive and child health, availability of adequate drinking water and sanitation facilities in all the urban and rural habitations of the country, levels of literacy particularly among the female population of the country, etc. While innumerable other public health issues also demand attention reproductive and child health particularly is a matter of serious concern.

Role of Mass Media

Planning and implementation of programmes aimed at covering large geographical areas and population need a large amount of mass media support. Mass media are powerful communication tools and are capable of contributing to rural
development through informing the target population of their need for certain critical services from long term point of view of individual and familial socio-economic development, and of the availability and accessibility of such services to the population. The geographical reach and population coverage of mass media is extensive and unparalleled. Mass media have been credited for information dissemination and awareness creation among masses for many years, and now they have become an intrinsic and inseparable part of individual’s social life. Mass media transmits information, influences opinions and attitudes, and moulds the population’s perspectives on most socio-politico-economic issues concerning people significantly. Education, Information and Entertainment are the main objectives of media networks. Here, State owned media and private media differ in their approach in presentation of programmes. While the former attach more weightage to “educating the masses”, the later, mostly concentrates on mass entertainment. Yet, both provide “Infotainment” a term widely used in media circles. Radio, in particular, the major development communication medium in India, has been devoting significant amount of time for health programmes and serving health information needs of the people over the past 45 years. The medium has already proved to be effective in addressing major health issues such as malaria, TB, family planning and pulse polio in the past few decades.

Health Indicators

Despite reasonably good efforts of the implementing agencies and the mass media globally accepted indicators of the effectiveness of health and family welfare programs show only moderate levels of success of such programmes in India. To quote few statistics the Maternal Mortality Ratio (MMR) (number of women dying during pregnancy or up to 42 days after delivery per 100000 live births) as per Sample Registration Survey (SRS) data (Government of India, 2010) in India is 212, and in Andhra Pradesh (AP) it is 134 (Karnataka 178, Kerala 81 and Tamilnadu 97).

IMR (Infant Mortality Rate) (number of infants dying from the time of birth , till completing one year of age per 1000 live births) as per NFHS-3 (National Family Health
Survey-2005-2006), is - India 57 and AP 53 (Karnataka 43, Kerala 15 and TN 31). Percentage of institutional deliveries as per NFHS-3 are - India 41% and AP 69% (Karnataka 67, Kerala 100 and TN 90). The percentage of children immunized against vaccine preventable diseases as per the same survey (NFHS-3) in India 44 and in AP 46.

India alone accounts for more than 10% Global HIV/AIDS (Human Immune-deficiency Virus/Acquired Immune Deficiency Syndrome) cases and is currently living with approximately 2.5 million HIV/AIDS positive victims and many more lakhs with STIs (Sexually Transmitted Infections) (National AIDS Control Organization, 2014). Andhra Pradesh is among the six high HIV/AIDS prevalence states in the country. Out of 2.5 million estimated cases of HIV/AIDS in India, about 10% are from Andhra Pradesh (Andhra Pradesh AIDS Control Society, 2014).

The high number of child marriages is an alarming issue in the state. As per NFHS 3 (2005-2006) among the women in 22-24 age group, as many as 54.7% are married by 18 years age (which at the time of NFHS-2 (1998-99) was 64.3% and NFHS-1 (1992-93) was 68.6%. The latest data (NFHS-3) also show considerable number (18.1%) are already mothers at the time of survey among the women between the age group 15-19 years. The figures in respect of child marriages in the state are higher than the national level situation (44.5%) and demand immediate attention. When compared to north India and certain other parts of the country AP has relatively been more effective in implementation of Health and Family Welfare programmes but not so when compared to the states of Kerala and Tamilnadu.

Maternal and child mortality is a matter of serious concern in rural India. Poverty, illiteracy, superstitions, vulnerability to adverse health outcomes, poor access to health care facilities etc., are the major factors contributing to high rate of MMR and IMR in India. Literacy level of AP is 67% lower than the national average of 74.04% (Andhra Pradesh Population Census-2011). Government has been implementing many programmes and schemes to improve the status of maternal and child health in the country. A complete reorientation of the Family welfare programmes in the country
focusing more on RCH areas is a major initiative in this direction. A detailed explanation on RCH programme/policy is provided below.

**Reproductive and Child Health (RCH) - Focus of the study**

The International Conference on Population and Development (ICPD) 1994 had established an International consensus on a new approach to policies to achieve population stabilization (NIHFW-2007). Under this approach, it was broadly agreed that fertility reduction should be addressed at the level of broad social policy, including reduction of gender discrimination in access to education, health care facilities and opportunities for income generation.

Reproductive health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity in all matters relating to the reproductive system and its functions and processes (UNFPA-1995). Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition are the right of men and women to be informed about and to have access to safe, effective, affordable and acceptable methods of family planning of their choice, as well as other methods of birth control which are not against the law, and the right of access to appropriate health-care services that will enable women to go safely through pregnancy and childbirth and provide couples with the best chance of having a healthy infant.

The Reproductive and Child Health (RCH) Programme was launched throughout the country on 15th October 1997 (IPHA (n.d.) workshop report, p.4). The RCH approach consists of need-based, client-oriented, demand-driven and high quality integrated services which include: maternal health services, child health services, prevention of unwanted pregnancies etc. There was fragmented attention in the decade of 1980s & earlier. The National Family Welfare Program has undergone a paradigm shift,
from the past, with its focus on Reproductive and Child Health and major changes in approach.

There is a close relationship between the fertility behaviour of women and population stabilization programme. Factors such as marriage at an appropriate age, good ante-natal care during pregnancy, institutional delivery, post natal care, mother and child nutrition, neo-natal care, immunization, child survival strategies, cafeteria approach for making available various services for family planning, availability, accessibility and affordability of comprehensive preventive and curative health care services for reproductive and sexually transmitted diseases etc., all have a clear and strong bearing on population stabilization. There is therefore a need to attend all these health issues effectively to be able to achieve the goal of health for all in general and addressing the RCH concerns of women in particular, as well as achieving an overall higher acceptance of the small family norm and thereby the population stabilization. Considering the importance of these issues and also the need to explore suitable health communication strategies in influencing the health seeking behaviour of people the present study has identified reproductive and child health issues as focus for the study.

All India Radio - The Public Service Broadcaster

Prasar Bharati is India’s first autonomous public service broadcaster (PSB). It is an autonomous corporation of the Ministry of Information and Broadcasting, Government of India. Today, Prasar Bharati through Akashvani (All India Radio) and Doordarshan networks provides maximum coverage of the population and is one of the largest terrestrial networks in the world. In India, PSB has played an important role in development sectors such as education, health, agriculture etc. In particular, AIR’s contribution to health sector has been extensive. Both All India Radio and the Health department of state governments are largely under government’s control and have been functioning in synergy since decades. The health broadcasts are planned as per the health policy of Government of India and implemented in coordination with the health departments at central and state levels.
All India Radio - Health and Family Welfare

All India Radio (AIR) has a national network of 261 broadcasting centers with 406 Transmitters (AIR, Citizen Charter - Dec. 2011). AIR has coverage of 91.85% of the geographical area, and 99.18% of the population of India. AIR broadcasts in 24 Languages and 146 dialects in home services. It has total 4 tiers of services; national, regional, local and external Services. In external services, AIR broadcasts in 27 languages; 17 national and 10 foreign languages. AIR has also Direct-to-Home (DTH) Radio services (21 channels) and has planned for internet based radio services round the clock. AIR follows international and national level social and cultural values and service standards in broadcasting.

Issues relating to health and family welfare have always been given special focus in AIR since inception. However, broadcasts, which were occasional in nature, became regular from 1967 onwards. At national level Family Planning Units (each consisting of an extension officer, a field reporter and a scriptwriter) were set up initially at 22 AIR stations. Later this was extended to several other centers also, and 14 small units with one field reporter and a special unit at Akashvani headquarters, Delhi were also established (Luthra, H.R., 1986).

Broadcasting Centers - State Level

There are 12 radio stations in Andhra Pradesh, four major stations and eight district local radio stations (DLRs). Few more stations were initiated at important regional centers, such as Mahaboobnagar, Karimnagar, Srikakulam etc. but they are not fully established units and mostly relay programmes from the nearby main stations. These stations located at important regional centres allot a considerable amount of broadcast time for health and family welfare programmes. While major AIR stations have fixed time slots of varied durations for different programmes, the DLRs are more area-specific and flexible, reflecting the needs of the people of the areas they cater to. They provide an opportunity for artistic expression and communication skills of the local
talent. To realize these objectives, field-based programmes are given more importance. In addition, commercial channels (two in number) and youth entertainment channels (three) which have higher listening rate and popularity among audience, also broadcast Health and Family Welfare programmes regularly.

While the above data represents the past, the detailed explanation given in the preceding paragraphs on the functioning of the system of health broadcasts in AIR stations in Andhra Pradesh provides the present status. Technological social economic and political changes in society have invariably been leading to greater transformation both in media in general and the health sector in particular. At present, the use of media in health sector has increased substantially when compared to the past. A good example of this phenomenon is the relentless radio campaign that has been taken up particularly to combat HIV/AIDS for which media support was sought since prevention is the only choice to contain the problem of HIV/AIDS. Since 1990s use of media by health sector is prominently visible. Use of media has increased mostly from year 2000 onwards consequent to the increasing need to spread messages for prevention of HIV/AIDS and Pulse Polio campaigns. Emerging dynamic leadership in health sector in most states of the country, as a result of the initiatives taken by the Government of India under the RCH program had also helped increased media programmes. Radio has been providing dedicated service to health sector with specialized units as explained earlier.

Though radio is considered as an important development communication media in the country, its potential has not been tapped adequately by the health sector. All India Radio had been broadcasting programmes in the areas of maternal and child health for many decades using different techniques and formats. It adopts sound methodologies and practices in health broadcasts. However, these efforts have been more on delivering the messages i.e., transmitting health content: yet a system of critical review of the initiatives was not developed since the inception of such programmes. The need for introspection and critical review in any programme implemented for relatively long periods of time requires no emphasis. Hence, the present study made an attempt to study the health broadcasts with special reference to Reproductive and Child health as well as explore
suitable alternate approaches for application in health communication process. The study is titled *Radio Campaigns on Reproductive and Child Health in Andhra Pradesh - Emerging approaches*. The long time contribution of AIR to maternal and child health is examined in terms of content, dissemination and reception and efforts are made to explore suitable approaches for future programming.

**Need for the study**

The perceived gaps in the existing system of health broadcasts for the above mentioned aspects i.e., content, dissemination and reception, are further explained as given below.

Radio has been broadcasting health programmes since many decades with full-fledged Family Welfare units, in coordination with health sector both at central and state level. However, it has taken a long time to reflect the paradigm shift in health programme policy (focus on reproductive and child health) in tune with the decisions/agreement made in the Cairo conference (The International Conference on Population and Development (ICPD) 1994). Coverage of RCH concepts is observed to be random and needs focus (Sharada, et.al, 2001).

Today for many members of the general public, press, radio and television are some of the main sources of information on health. In India, radio is fulfilling the responsibility of disseminating development information of which health is a major component. When compared to interpersonal communication broadcast media has many advantages. Messages are disseminated to millions of people through many channels instantly. Use of creative formats and techniques make the broadcasts interesting and draw the attention of listeners. These and many other aspects pertaining to dissemination of messages needs to be evaluated on regular basis to understand the effectiveness of the same.
Media organizations focus more on functional issues than feedback collection. This is more so in radio programmes in the areas of social and economic development where broadcasters think of providing the message dissemination service as a major responsibility. Media activity is time bound and broadcasters’ energies day and night are spent mostly on feeding content to the transmitters.

The discussion clearly shows the need for research on the effects of campaign particularly using radio, and the present study is expected to make significant contribution to the field of Health broadcasting.

Few major studies which are conducted on regular basis both in media and health sector concentrate only on certain broad aspects pertaining to health broadcasts. India Readership and Indian News Papers Survey which are considered as standard research data among media organizations include few questions on reach and coverage of electronic media in a routine manner. Similarly, the National Family Health Survey (NFHS) which is considered to be a standard survey in health circles also includes only a very few questions particularly on the source of media for health information.

Routine programming does not allow for detailed study of various specific issues (content, dissemination and feedback). There are special efforts made periodically with better planning. The objective of this study is to look at a selection of such special efforts and to discover the best practices used in them for developing content, dissemination strategies used, the modes of feedback collection, and incentives for better audience participation. The plan of this study is explained below.

**Organization of the Study**

Chapter – 1 Explains Health Communication, importance and need, role of mass media, All India Radio – Health and Family welfare and the need for the study

Chapter – 2 Provides an overview of the research available on health broadcasting with special reference to reproductive and child health.
Chapter – 3 that follows will explain the objectives and the methodology selected for the study. The theoretical framework used for the study is detailed in the chapter.

Chapter – 4 present the detailed reports on 5 campaigns (cases) chosen for the study.

Chapter – 5 Data presentation and Analysis includes, (1) Basic details of all five campaign cases and (2) Comparative analysis of five campaign cases (Content, Dissemination & Reception). A brief report on the ‘Listening Sessions’ is also presented in this chapter.

Chapter – 6 deals with Multivariate Cluster Analysis.

Chapter – 7 describes Best practices and emerging approaches from the study.

Chapter – 8 will present the major findings from the study.

**Methodology**

Vast amount of information on Reproductive and Child Health has been generated over the years at global, national and state level covering cities to remote areas. There is a need to draw lessons, inferences and best practices from this experience and utilize them suitably in implementation of health communication programmes. Availability of detailed project inputs provides an opportunity to understand the effects of the programmes as case studies. Particularly, activities implemented in campaign mode have better scope as case studies since they are usually designed for specific purposes and hence include additional efforts in terms of content, dissemination and reception.

**Meta Analysis**

The study identified a rich pool of data satisfying these qualities. AIR and Department of Health and Family Welfare, Government of India, together implemented a series of health broadcast campaigns focusing on Reproductive and Child Health (RCH) and generated data on the effects of the campaigns in the form of feedback. The study selected five such campaigns as multiple case studies and conducted a meta-analysis of the feedback generated during their implementation to understand effects of the efforts in
influencing the health seeking behavior of the community. Meta analysis is an appropriate approach for extracting characteristics from a range of studies that have similar design and objectives. Meta analysis approach has been used extensively in medical and health research. The method can be used for both micro and macro level issues. In the area of health communication the application ranges from message designing, specific health issues, theories and models to quantum of coverage of topics, reception of programmes etc. The present study dealt with issues relating to the implementation of campaign at macro level. The work is not in the tradition of a theoretical study. This is an applied research and explored practical aspects pertaining to health campaign broadcasts to draw insights.

Why case study method?

Opportunities for conducting major studies using methods such as surveys in health broadcasting are rare. Such methods require enumeration of radio ownership and listenership and the exercise requires considerable budgets, and manpower. Usually projects are planned and implemented in the last minute and do not get necessary time and resources to design evaluation activity. Hence, attempts to assess the effects of the programmes are limited in the field of health broadcasting. Moreover, media studies mostly depend on recall of programme content for which studies need to be planned instantly. Another problem faced is, audience are bombarded with messages on different subjects by many channels day and night and depending on recall alone may not be of much use. Isolating the effects of radio on any issue is an additional challenge. The review of literature has also highlighted the need to develop assessment techniques to specifically measure the effects of radio when the messages are provided through different media.

The research methods generally used in health broadcasting are: content analysis, feedback analysis, listening sessions, telephone interviews etc. The increased competition among private channels made the “Audience Ratings” technique most popular at present though the method is felt to be superficial and the technique is often criticized by many.
The limitations of communication research in general, the low attention paid by media researchers to radio and the constraints of the medium which functions by and large under government control in India calls for a special effort to understand the potential of the medium particularly in health communication. In this situation the study found extensive data pertaining to five major radio campaigns on reproductive and child health in the recent past. The data is primary in nature, empirical and unutilized. An in-depth analysis of the five mega campaigns as case studies to understand the contribution of Radio in dissemination of relevant information on reproductive and child health was felt to be more appropriate.

Multiple Case studies

The five health communication campaigns which collected feed back on certain basic and important aspects relating to reproductive and child health broadcasts would help throw some light on the strategies/approaches/methods used and the effects on target audience. Therefore, the study is designed to use the selected campaigns as multiple cases. The campaigns are more of a replication of the methodology using a common subject/topic with slight variations in content and dissemination strategies. Response received to the first campaign encouraged to use the same methodology and the process was repeated again and again. Since the sponsoring agencies are from health sector the topics chosen for campaigns were almost all similar.

Study Framework

The five campaigns identified for this study have not only comprehensively covered all components of RCH but also included provision for feedback on media usage patterns. All the campaigns were well planned from proposal to documentation. The entire process / framework of the implementation of the campaigns has been segmented for this study as follows:
a) Production (Content) – Processes followed in the production of Telugu and Urdu content (Titles, scripts, formats, resource persons, pre testing, celebrities etc)

b) Dissemination – Allocation of budget, selection of channels, extent of reach, negotiations, days and slots, repeat broadcasts.

c) Reception – Feedback (prize schemes, competition questions, FCT, sponsors, winners, delivery of prize money, analysis).

The following are the Aims and objectives defined for the study.

**Aim**

To study the role of radio as a medium of health communication with special reference to Reproductive and Child Health and explore the emerging approaches in building awareness.

**Objectives**

1. Content
   a. To examine the content of Reproductive and Child Health (RCH) broadcasts of the campaigns under study
   b. To examine the content generation practices in RCH broadcasts of the campaigns under study
   c. To compare the content generation process of the campaigns
   d. To compare the response to contents of the campaigns

2. Dissemination
   a. To compare the dissemination strategies adopted by the campaigns
   b. To critically analyze the coverage potential of health broadcasts
   c. To understand the listening patterns and reach of RCH broadcasts
3. Reception
   a. To examine audience profile
   b. To examine feedback from the five campaigns
   c. To assess the influence of certain variables on the feedback.
   d. To compare the differences in reception of the campaigns

4. To identify best practices and approaches emerging from the five campaigns on RCH

Data Collection - Campaign Case studies

In addition to programmes broadcast by AIR on regular basis Department of Health and Family Welfare with the support of external funding has made some special efforts in implementing radio campaigns with focus on RCH in Andhra Pradesh. Similarly some private organizations (funded by government) working on different components of RCH have also broadcast programmes on these issues using innovative techniques.

Though health broadcasting is a regular feature the user agencies paid special attention to some RCH campaigns particularly in reflecting the paradigm shift, i.e., focus on reproductive and child health. Efforts were also made to evaluate the programmes and considerable data was generated during the campaigns in the form of feedback. The programmes are designed and conducted in campaign mode and the methodology is replicated using the same topics. The following five campaigns satisfy the above description.

- Janani (RCH issues) 2001-2002
- Chilaka-Gorinka (Healthy Mother and Happy Child) 2005
- Chiru Chukkalu-Chiru Teekalu (Child Immunization) 2005
- Yuva Tarangam (Adolescent Reproductive Health) 2009
All the five campaigns have similarity in terms of concept and method. The data generated by the campaigns included a detailed explanation of methodology, process of broadcasting along with the feedback analysis. Since the feedback was collected as part of the campaigns the data represents effects of the broadcasts on certain important aspects at macro level.

Data pertaining to all the five campaigns is available with the implementing agencies. Availability of feedback to programmes at macro level is a rare opportunity, as it requires huge resources and manpower to generate it. The programmes also included a prize scheme. The post card originally intended to collect response for the prize schemes relating to the episodes was converted to a mini questionnaire and additional information was collected from listeners. In addition to post card the campaigns also used email and SMS to collect feedback. Normally the prize scheme response is limited to one or two queries. In this context, questions pertaining to district, block, village, age, education, station listened to, timings tuned etc. were also sought in addition to queries related to the contents of the programme. Data collected included ...

1. Voluntary feedback: Letters received from listeners
2. Voluntary feedback solicited through prize scheme
3. Listening sessions: To understand the effects of programme which enables to incorporate necessary changes in the ongoing broadcasts.

Majority of the responses are drawn through the second method, however the other two methods have provided qualitative dimension to the data collected.

**Voluntary feedback – Advantages**

The listenership could be much more than the letters received. Isolating radio for measuring the effects is possible. Voluntary response needs initiative and little spending. Competition ensures attentive listening No investigator bias. Lot of qualitative response in addition to quantitative. Response from surrounding states which is usually not done in
formal approach. All 23 districts are covered in response. Response from huge number of mandals and villages has an advantage compared to conventional limited sampling and less financial implications.

**Disadvantages and limitations**

The questionnaire had to be brief. Some do not provide details. Only those feedback form that complete in all respects were used. Since the response size is big this is not a limitation, as adequate number valid responses were available. The sample was not a representative sample, however, the number of responses is huge for each campaign and covers entire area of transmission and sometimes beyond the specified area. The actual listenership could be much higher than the response received.

On the whole, the data identified is scientific in nature, responses are considerable in number, covers both macro and micro level issues, covered huge areas and focused on RCH topics. The replication techniques used in implementation of the campaigns has added the value of consistency.

**Area for the Study**

All India Radio Stations in Andhra Pradesh:

All India Radio covers 99% by geographical area and 99.5% by population in Andhra Pradesh. The network has 12 AIR stations broadcasting on Amplitude Modulations (AM) and Frequency Modulations (FM) frequencies. Four Regional stations (AM), seven FM stations and one AM local station cover the entire state. The average broadcast time per day varies from 12 to 16 hours on different channels. In addition, five urban FM channels provide entertainment to the listeners.
Plan of Analysis

The data (feedback) for the above campaigns collected is examined in terms of geographical reach, socio-economic profile, extent of population coverage, understanding of the content and overall response. The analysis is presented in the following order:

- Detailed reports of the 5 selected campaigns (cases)
- Data Presentation and Analysis: Basic details of the campaigns, Comparative analysis of the content, dissemination and reception of the five campaigns (cases) and Listening sessions
- Multivariate cluster analysis to identify significant differences between the campaigns.
- Best practices and emerging Approaches from the study.
- Major findings

Scope and Limitations of the study

During the implementation of five major radio campaigns systematic data was generated. Because of the scale of the campaigns that covered the entire state, its population and beyond, responses were large in number addressing both macro and micro level issues, focused on RCH topics. The replication technique used in implementation of the campaigns has added the value of multiple studies. However, the response is a solicited feedback to programmes broadcast. This cannot be attributed to general listenership. The data collected is not the outcome of an organized research study, through scientific random sampling techniques. The response is not representative but is extensive and voluntary. The data certainly provides an understanding of the implementation of radio campaigns on RCH but the findings cannot be used for making generalizations. In the absence of adequate research in the field of radio broadcasting on health, the present study will be useful to both All India Radio and Department of Health and Family Welfare in designing health broadcasts in future.
Major findings

The five campaigns are referred to as C1 (Campaign 1 – Janani), C2 (Campaign 2 – HMHC-Healthy Mother and Happy Child), C3 (Campaign 3 – Songs), C4 (campaign 4 – Immunization) and C5 (Campaign 5 – Yuvatarangam) in the presentation as the terms are frequently used in the report.

The study highlights the role of All India Radio as a medium of health communication with special reference to Reproductive and Child Health (RCH).

Basic details pertaining to the campaigns

Campaigns: All the five campaigns selected for the study had focused on Reproductive and Child Health. Content generation practices, process of dissemination and evaluation methods adopted in all the five campaigns are by and large similar. The campaigns were provided adequate budgets under special projects. The campaigns used innovative formats, giving more importance to drama, songs, anchoring and music. In addition to the concerned government departments, others such as agencies connected with the projects, public health experts, resource persons from the projects, creative artists, musicians, lyricists and writers had contributed to the content development. The broadcasts made under these campaigns included specific provision for feedback collection from the audience.

Language: All the five campaigns broadcast were mainly in Telugu language. Two campaigns included some content in Urdu language also (campaigns 4 and 5). For the first time in the health communications efforts in the department, full length sponsored programmes in Urdu language were produced and broadcast on par with the Telugu broadcasts. The response received for Urdu campaigns (both 4th and 5th campaigns) is by and large in agreement with the response received for Telugu campaigns.
Total response: The response was a feedback to radio campaigns specially designed and broadcast with a focus on RCH for specific durations spread across a period of 7 to 8 years. Each campaign received a huge response (C1 – 9404, C2 – 4256, C3 – 1851, C4 – 9656 and C5 – 1049 responses). Except C4, all other campaigns evaluated all the responses received from the listeners. In view of the huge number of responses, C4 had to limit to 2795 responses for the present analysis.

State wise response: The programs had reached audience beyond the state of Andhra Pradesh, and listeners in states bordering Andhra Pradesh have also derived benefit from the programs. Though the number of responses received from other states was small, the feedback can be considered as valuable since it reveals the potential of transmitters to reach larger areas covering huge population residing in remote corners of the state and surrounding border areas. The states which received these programmes are Karnataka, Tamilnadu, Odisha, Maharashtra Chhattisgarh and Assam. Of all these states listeners from Karnataka have responded relatively more in number for all the four campaigns.

Gender wise response: Of all the responding listeners of the various campaigns, men outnumbered women. The difference was very sharp in case of C3 and C5. The percentage of female response was also reasonably good, though variations could be seen among different campaigns. RCH programmes included sensitization of men on women’s health issues and high response from male listeners was an encouraging sign in this direction.

Age Wise response: By and large, listeners in reproductive age have responded more than older persons. Listeners in the age group of 15 to 35 followed by 35 - 50 responded in significant number. The response shows the success of the campaigns in reaching the targeted group for whom the programs were exclusively designed.

Content

Response to contents: Frequency level comparisons were possible only among three campaigns (C1, C2 and C 3). C4 had completely focused on Child Immunization, and C5
on Adolescent Reproductive Health. On the whole, the topics, Age at marriage, Oral rehydration therapy, Adolescent girls’ health issues, importance of Immunization and Reproductive tract and Sexually transmitted infections received higher response.

**Appreciation of content:** In addition to responding to the competitions (which were conducted as a part of assessing the listeners’ interest in the program as well as improving the listenership to the programmes), many listeners have expressed their views about the programs. The responses include appreciation of the efforts to educate people on health issues. They also mentioned specific messages, personal experiences, case studies, suggestions for improvement etc. in the feedback.

**Understanding contents:** The ‘competitions’ were used as a strategy to collect the feedback. A Majority (around 92%) of listeners gave correct responses. The Songs campaign which used lyrics to communicate health messages revealed some deviation in this regard. Only 33.45% could give correct answer followed by 26% partially correct and around 23% incorrect.

**Recall of contents on immunization:** A majority of listeners recalled one point (71.68%) of the main thrust of the programmes, and 15.49% referred to two points. A significant 7.63% wrote three points and 5.20% mentioned four points. Many listeners wrote additional information about immunization. This included details of vaccines, names of the killer diseases, schedule of doses as per age, doubts and clarifications about giving vaccines, positive and negative stories, problems in availing services, complaints about services, personal experiences and case stories and how the programs helped in availing services, etc.

**Dissemination**

**Station/Channel-wise response:** AIR Hyderabad and Vijayawada primary channels received higher response in almost all the campaigns. It is seen that Primary channels that broadcast development programmes received higher response from listeners, when compared to entertainment channels. Many consider entertainment channels to be more
popular among listeners. However, it is a fact that the entertainment channels are limited to major urban centers, and do not enjoy similar large area of broadcast coverage which the general channels command. The results clearly indicate that popularity without sufficient extent of broadcast coverage may not be of much help. It is further seen that even in areas where both entertainment and primary channels are in position and are broadcasting, the primary channels have registered higher score. Campaign wise response is given below.

**Time of broadcast:** Morning slots were referred to as the program they are responding to, by a majority of listeners in all the campaigns. However response for the programmes broadcast in the slots of afternoon 1.30 pm and night 8.00 pm was also not less. This response disproves the opinion among the general public that radio listening is reduced due to viewing television in the evenings. It is observed radio listening is still active both in the morning and night.

**First Broadcast (FB) and Repeat Broadcast (RB):** First broadcast is listened to by more number of people. However, many listened to repeat broadcasts.

**Reception**

**Region wise responses:** Andhra region showed an edge over others in C1 and C5. Both Andhra and Telangana scored similar number in C2 and C4. Telangana received a larger response in the Songs campaign (C3) as compared to Andhra. Rayalaseema stood lower among all the three regions though the response was significant.

**District wise responses:** All districts have registered significant level of response. East and West Godavari, Guntur, Kadapa, Hyderabad, Nalgonda and Warangal have showed relatively a better response. Districts of Adilabad, Nellore, Rangareddy, Srikakulam, Vizianagaram, responded a bit less to C3. Variation in response among different campaigns was also observed.
**Rural Vs. Urban:** Rural followed by semi-urban and urban was the order of response from high to low score (C1). The results are drawn from a large data of 9404 responses received from different corners of the state including remote areas. The results prove that radio continues to be a suitable medium for development communication.

**Education-wise response:** C5 intended to reach adolescent youth directly, and in particular to school goers and provide them information on adolescent reproductive health. To see the utility of the campaign, information on the educational background of the listeners was also collected. From an analysis of the data, it is seen that 19.83% of the respondents are degree holders. This is very closely followed by the proportion of respondents (17.64%) with intermediate qualification. Respondents studied up to high school level are 15.44% and 3.05% have education up to middle school level. Further, 2.10% of the respondents are either post-graduates or holding higher professional degrees such as B.Tech /MBA.

**Multivariate cluster analysis**

In view of the multiple campaigns the tables included multiple data sets and the analysis for certain aspects could not be assessed precisely. Items with limited number of variables could be analyzed easily where as tables with more number of variables made it difficult to arrive at accurate and valid conclusions and necessitated further statistical analysis. To cater to the need Multivariate cluster analysis is identified as an appropriate statistical measure to further explore the data. Three aspects representing content (topics), dissemination (AIR station) and reception (district) which posed difficulty in understanding the response in comprehensive manner were selected for the analysis. The current clustering has been done using K-Means algorithm using Euclidean distances.

**Results/Clusters**

**Topics:** The various contents (topics) focused upon in the campaigns are grouped into four clusters. ORT and adolescent girls’ health issues are grouped in one cluster. Age at
marriage which received high response at frequency level is allotted a separate cluster. Ante-natal care, reproductive tract infections and sexually transmitted infections, girl child and gender sensitization and reproductive and child health concept are combined in one group. Nutritional anemia (women), child nutrition and breast feeding, acute respiratory infections, spacing devices (more emphasis on condom), IUD and oral pills, low birth weight and detection and care of high risk child, small family norm, vasectomy (with more emphasis) and tubectomy, immunization against killer diseases, post natal care, condom and public health were grouped under one cluster.

ANOVA (Analysis of variance) shows the campaigns between clusters to be statistically significant.

Station/channel: As per the Dendrogram, data is distributed in two clusters: stations which scored high in listeners’ response, such as Hyderabad and Vijayawada are shown in one cluster and the remaining stations in another cluster. Visakhapatnam and Kadapa, which showed significant level of listeners’ response at frequency level in most of the campaigns, were also put in second cluster along with AIR stations which received low response.

ANOVA (Analysis of Variance) shows the campaigns between clusters to be statistically significant.

Districts: The data is grouped into four clusters. Cluster-formation has not revealed any contradictions when compared to frequency distribution. As in case of station-wise distribution, certain districts which appeared to have fared relatively better in preliminary analysis were also grouped along with districts with low response. East Godavari which recorded consistently steady score in all the campaigns is formed as a separate cluster. Similarly, confirming the results at frequency level, Guntur and Hyderabad are put in one cluster. Kadapa, Chittoo, West Godavari and Warangal, though showed some response in all the campaigns, are grouped as one cluster along with few more stations with low response. Remaining districts with low scores are formed as one cluster.
ANOVA (Analysis of Variance) shows the campaigns between clusters to be statistically significant.

**Influence of Certain Variables**

The study explored the influence of certain background characteristics and variables on the responses and noticed slight variations.

**Best practices and Emerging approaches**

The campaigns being focused upon in the present study have adopted different approaches when compared to the regular routine health broadcasts on RCH. Special attention was paid to every aspect such as content generation, dissemination plan and collection of feedback on reception etc. The best practices and approaches are discussed in comparison to the existing practices in health broadcasts in a broad perspective. The following items are included in the discussion.

**Contents:** Development Vs. Sensational, Quantity Vs. Quality, Random Vs. Focused or Regular Vs. Campaign, Treatment Vs. Prevention, Detachment Vs. Involvement, Service Vs. Sponsored.

**Dissemination:** Multiple Vs. Single medium, Long Vs. short duration, Isolation Vs. Coordination, Routine formats Vs. Special, Simple Vs. Strategic and Repeat broadcasts.

**Reception:** One-way Vs. Two way, Qualitative Vs. Quantitative data collection, Unknown Vs. Known.

Focused contents, suitable and appropriate formats, lively anchoring, music and songs helped the campaigns in receiving good response. Adequate budgets, attractive packaging and creating publicity environment further added value to the efforts. Repetition strategy helped reinforcement. All campaigns gave importance to documentation of the process and effects of the broadcasts.
References


