

CHAPTER – 5

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction and Justification of the Study

Health communication is an applied area of study concerned by the roles performed by human and mediated communication in health care delivery and health promotion. It is not limited to checking the pragmatic influence of human communication on the provision of health care and promotion of public health, but further also to enhance their quality.

It can be inferred that health communication is mostly problem – based, aiming at identifying, examining and solving problems related to health care and its promotion among larger public.

Concept of Health Communication evolved almost past three decades. Subsequently it has received recognition among international scholars, policy planners and practitioners ranging from communication and mass media, sustainable development, public health, sociology, psychology, epidemiology *etc.* for their local and large-scale development programmes, researches and academic upgradation.

However, same is not observed and true to Indian scenario. Only countable researches have paid their attention towards Health Communication and Indian Health Programmes catering to Health concerns of second largest populated country on the world map.

Therefore, the presents research was planned to initiate research efforts in this neglected area of knowledge. To gather insight into the ground realities related to Health Communication, it's Strategies, Provision, Usage, Barriers, Benefits and additional felt needs, the present research was set.

The National Health Mission envisages achievement of universal access to equitable, affordable and quality health care services that are accountable and responsive to people's needs. One of the main programmatic components include

Health system strengthening, among others *viz*, Reproductive-Maternal-Neonatal-Child and Adolescents Health (RMNCH+A), Communicable and Non-communicable Diseases.

The Health system lies on both human and Non-human resources spread from top to grass-root level. In such a massive public health programmes human resources by means of using supportive non-human resources–infrastructure provides health services and promote health/healthy behaviours among public.

Health Communication is an essential integral ingredient in health service delivery and promoting desired behaviours using various Health Communication Strategies like IPC, mid media and mass media channels. The past models of health care programmes had different perspectives and hence different communication approaches used to achieve the targets. The National Health Mission has adopted, decentralised PPP model for its implementation up to grass root level. The ministry has designed a strategic framework for targeted IEC activities using 360-degree communication approach. The year-long plan has month-wise focus on health days and health themes

Under the strategic component communication, several MOUs and tie-ups have been established for effective inter-sectoral convergence and greater possibility of achieving aims on health indicators through communication such as agencies at national and local level like, Directorate of Field Publicity (DFP), Print, Television – Doordarshan (Prasar Bharti), Radio, Outdoor publicity, Directorate of Advertising and Visual Publicity (DAVP), Social media platform and participation in events like Vibrant Gujarat Global Trade Show 2019. A huge amount of budget is allocated for the same.

The strategic communication plan is basically to strengthen and facilitate the work performance of health service providers based/Station at facilities (Doctor, Nurse, Pharmacist *etc.*) or on fields (ASHA, ANM, AWW *etc.*). The objective of IEC is to generate demand for health services and to promote health seeking behaviours. The different strategies have catered to the different needs of rural and urban masses through different modes of communication, be it Inter- Personal Communication,

Mid-media or Mass media activities. (Ministry of Health and Family Welfare (Government of India), Annual report 2018–19, pp. 361).

The present study aims at preparing a profile of Health Care System with special reference to Health Communication component of National Health Mission at Chhotaudepur district, Gujarat State.

The reviewed studies highlighted on serious loopholes in availability, provision/supply chain managements, use, barriers faced by the health functionaries and lack of absence of motivation, monitoring and evaluation of use of Health Communication strategies by the seniors.

Moreover, such an important data with regards to use of IEC are rarely available even in large scale surveys like National Family Health Survey (2015–16)

NITI Aayog, Strategy for New India@75 (November, 2018), Chapter–27 Public Health Management and Action, embraces upon way forward to mobilise public health action at multiple levels by strengthening the Village Health Sanitation and Nutrition Day platform to cover a broader set of health issues across various population groups instead of only focusing on child health.

Hence the most important carriers of health information *i.e.* the IEC/ICT/BCC strategies from the health planners to that of grass-roots, needs to be paid utmost attention. Country need expedited efforts with regards to planning need based effective Health Communication Strategies, its proper flow to the health workers, and also efficient system to monitor and evaluate its usage related issues and challenges for appropriate results.

5.1.1 Justification of the study in context to the Department of Extension and Communication

The Department of Extension and Communication plays active and efficient roles as prescribed by the University Grants Commission (UGC) in all three areas concerned with Higher education *viz.* Teaching, Research and Extension.

The department is involved in disseminating knowledge on the applied, core and allied of concepts on Extension and Communication focusing not only theoretical

understanding but offering practical experiences, skills related to selecting, designing and using appropriate communication strategies for the priority-based development issues. Therefore, the department curriculum includes courses like, Extension methods and materials, Communication Media for Development, IEC for development, Basics of Development Communication, Writing for Development, Software in Print Media, Software in Electronic Media, Software in folk Media, Communication for Development, Social and Behavioural Communication, Development Communication, Communication theories *etc.* Further, curriculum revision is a regular feature in the department. The study with its elaborative as well as in-depth findings may contribute to the curriculum designing and updating as per the prevailing current trends in the society and development sector.

Findings of the investigation may provide evidence-based experiences for designing various training programmes, capacity building workshops for the health care providers highlighting the proper usage of various IEC and ICT materials while catering to the various developmental issues.

These activities can be very well undertaken in the both urban and rural outreach programmes. To carry out systematic outreach programmes by both Undergraduate and Post Graduate programmes is a routine identical feature of the department which has help earn respect in the field of development programme for need based planning, effective execution and systematic evaluation. Thrust areas like health-specifically reproductive health, adult and non-formal education, environment education, value education, skill development *etc.* catering to women, children, adolescents, school teachers, community health workers *etc.* are taken up regularly. In past department had collaborated with government and Non-Government Organisations for the several such development programmes. Department can create/provide a platform to share such knowledge while organising need based and pertinent seminars and workshops for communication media planners, practitioners, academicians, public health educators and public health providers.

Apart from this, in totality the department is actively engaged in research in the field of Extension and communication. In past department has undertaken some studies and action projects on various government efforts pertaining to programme appraisal, skills development *etc.* on Right to Education, Integrated Child Development Scheme (ICDS), Indira Aavas Yojana *etc.*

The present investigation would be a torch bearer study with the conceptual framework of Health Communication and National Health Mission in tribal district of Chhotaudepur. The study would throw light on various emerging areas of research related to Health Communication Strategies, availability, use, barriers, needs for diffusing relevant specifically Health and which are broadly applicable to behavioural change and developmental messages too.

Hence the present study may be contributory in the three well laid dimensions of higher education *i.e.* teaching, research and extension and is justified in context to the department of Extension and Communication.

5.1.3 Justification for Selection of Locale of the Study

Tribal population in India is undergoing demographic, socio-economic and health transformation besides other indicators resulting to changes taking place at global level and in India too. This is applicable to Chhotaudepur district too. On 15th August 2013, Chhotaudepur was carved from Vadodara district for ease of administration for bureaucrats and government programmes.

The Chhotaudepur district is one among the 14 tribal districts of Gujarat, constituting 33 districts in total. The district shares border with Madhya Pradesh and Maharashtra. The major tribal population inhabits in rural and forest area; the habitats are mostly amidst natural set up surrounded by jungles, water resources and small mountains.

Narain, J. P. (2019) in his editorial article, stressed on urgency of research in tribal area. 'At present national data are scant thereby providing a fragmented picture of tribal health and obscuring tremendous diversity among tribal groups scattered across the country. Disaggregated data by specific tribal groups and assessing the health, cultural and economic determinants of health, is therefore, urgently needed.

Such research data will have a crucial role in designing and initiating evidence-based health policies, strategies and public health action suited to their unique social, cultural and geographical environment.’

Decentralised planning and implementation of National Health Mission is a core value of overarching nationwide programme. Ministry of Health and Family Welfare and Ministry of Tribal Affairs (2018), elaborates that ‘Health literacy is low among tribal population. Since, knowledge is the best pill and vaccine, a massive health literacy drive for continuous health education of women, men, youth and children is a cost-effective intervention. Some health literacy strategies are targeted mass communication (wall paintings, posters and media); health science exhibitions on mobile vans eg. ‘video rath’; folk media (folk theatre, street plays, cultural groups, health education courses and activities at schools; every contact with health system (ASHA, ANM, PHC, MMU) must be accompanied by a five-minute health education; information Technology (tablets, mobile phones, village volunteers and VHSNCs).’ Further the report noted significance of BCC campaigns and research while achievement of Objective 3, *i.e.* To empower the tribal people to adopt health practices to enhance their capacity for self-care.

Design effective Behaviour Change Communication campaigns.

- a) The promotion of healthy behaviours requires formative research with ethnographic inputs to feed into health education and communication strategies; and to define the content of the communication.
- b) Health campaigns must necessarily mix a strong endorsement of good practices inherent in tribal cultures– with a reasoned and sensitive disavowal of harmful practices.
- c) All BCC strategies must recognise the heterogeneity of tribal groups and the need for tribe and region-specific interventions, in the local language and dialect.

Almost all previous researchers noted the need and significant of culture specific, need and evidenced based, comprehensive and coordinated empirical data and thereby development and roll out of tailored Health Communication Strategies.

In case of Health Communication Strategies under National Health Mission there existed immense dearth and therefore the present study foreseen significant scope of present research in tribal dense Chhotaudepur district of Gujarat state.

Researcher's inclination towards health communication study and personal concern for tribal population, past exposure of field supervision and feasibility to travel to Chhotaudepur were the added reasons besides above described points of rationale for selection of the district as locale for the present enquiry.

5.1.4 Justification of samples of the Study

Sullivan et al. (2012) noted that 'an adequate assessment of health information needs, including opportunities, barriers and gaps is necessary for designing effective communication strategies and producing actionable information.'

Comprehensive communication strategy adopted with a strong behaviour change communication (BCC) component in the IEC strategy; dissemination in villages and lowest levels. There is participation of non-government agencies and professional and specialized agencies, visible mass media efforts in massive health communication efforts. There is a substantial portion of the interpersonal BCC effort is through local ground level workers including ASHA and ANMs, and community level structures equipped with communication kits, interacting on a one to one basis with families. (Ministry of Health and Family Welfare (Government of India), NHM Manual for District level Functionaries, 2017)

NHM has a well-defined implementation framework up to grass-roots. In such a framework the vertical and horizontal flow of communication plays very crucial role and thereafter contribution made by each official and health worker. A huge amount of budget is allocated for achieving health behaviours and thereby improved health status of all sections of society through the ASHA programme under NHM; it becomes essential to check proper utilization of the resource *vis-à-vis* the health status of the people.

Few studies could be found on exploration of role performance and service delivery functions of health workers in India. There is a dearth of researches with reference to provision, use and perceived benefits of Health Communication

Strategies expressed by the key health functionaries (ASHA, ANM/FHW and ASHA Facilitator). The researcher did not want to leave a single stone unturned while measuring the status of Health Communication under NHM in Chhotaudepur, tribal area. Therefore, it was decided to select samples from majorly all grass-root level health functionaries and the Chief District Health Officer to understand the Health Communication component properly.

The study may highlight the various hurdles / barriers related to Health Communication Strategies if any by them. This may help in eradicating the felt barriers and bringing change in designing, distributing policies of the health communication system used under NHM. This in turn may help in increasing the effectiveness of health communication efforts in the selected tribal district-Chhotaudepur.

5.1.4.1 Justification for Selecting the ASHAs. ASHA being the grass-root level health activist under NHM, her responsibility as Link worker, mobiliser and service provider using Inter personal communication approach with beneficiaries and health care machinery is very crucial and significant.

ASHAs are first port of Information and health care needs. She has to actively work in coordination with AWW and ANM/FHW for organizing and celebrating some special days in communities like *Mamta* Day, Village Health and Sanitation days *etc.* She has to imbibe better health care behaviour amongst community people specifically vulnerable groups like women, adolescents, new-borns, children and old age people. ASHA has been assigned many responsibilities to provide health care facility at household level.

To be able to perform all her assigned roles, ASHA has to be an effective Health communicator. Therefore, it was felt necessary to study different strategies used while performing her prescribed roles.

On supply side she should be able to provide correct information and treatment to beneficiaries. While attending to queries during ANC visit, pregnancy complications, Home Based New-born Care, Initial Breast-feeding practice *etc.* She should be able to guide and counsel in a most appropriate way.

In some places NGOs are working in close partnership with government NHM programme. They have provided ASHA with some IEC materials in their areas and in some parts of the state ICT based devices like Handheld device, PDAs and mobile facilities are given on experimental basis.

Government of India has also developed a separate IEC department under NHM which is responsible for designing general BCC/IEC materials for all over India. However, states are given responsibility to adopt and modify those IEC/BCC strategies as per local applicability and requirements.

There is a provision of State Level Guiding Resource centre to facilitate the ASHA programme. Immediately after selection ASHA undergoes rigorous straining. She is also trained to use Communication to promote behaviour change. Therefore, the present study is well justified in terms of adoption and benefits perceived of the Health Communication strategies by ASHA workers to perform her roles.

The present study attempts to check the availability of communication strategies with ASHA workers. It further aims to identify needs and requirements related to Health Communication strategies be it IEC (Chart, Poster, Cards, flipbook, booklet *etc.*) Mass Media (Radio, TV, Newspaper, Magazines, Hoardings/Banners, Wall painting *etc.*) ICT (Computer, internet, handheld devices, Mobile and smart phones *etc.*) to perform roles of ASHA as key health worker, Behaviour Change agent, Record keeper and Key informant. There are evidence gaps with respect to the extent to which ASHAs can be health activists or agents of change, supporting community participation and empowerment which are crucial aspects of health improvement and sustainability in context to her use of Health Communication Strategies. The study would be able to provide a guideline for proper planning and utilization of budget allocated for communication on most appropriate tailor-made model and theories of Development Communication and Health Communication in particular for ASHAs under NHM.

5.1.4.2 Justification for Selecting ASHA Facilitators. According to Department of Health and Family Welfare, GoG (n.d.), Guidelines for ASHA Facilitators, there would

be one ASHA facilitator for every 10–20 ASHAs, as the first level of support. The ASHA facilitator is involved the selection of the ASHA.

ASHA facilitators main roles comprised of monthly review meetings, respond to grievances, maintain records of ASHA activities, attend Village Health and Nutrition Days with the ASHAs, and attend monthly block PHC centre meetings. Very important role is to support ASHA to promote healthy behaviours and improve service access among difficult families during household visit.

During the course of study, it may also bring to the notice the responses expressed by the ASHA Facilitators while with regards to selected aspects related Health Communication Strategies (provision and use) for promoting desired behaviours. Systematic study of barriers may help development and health care planners to make alternation or improvement in the present communication strategies for future use.

5.1.4.3 Justification for Selecting Female Health Workers. The Female Health Worker is based at Subcentre, which is the first level of the health system. So, her role is very crucial for stepping in patients at the subcentre. Moreover, she is also responsible to convene Village Health Nutrition Day in a village, which is a monthly activity wherein she carries out vaccination and provides ANC services, conducts counselling session and contraceptive services to eligible couples.

So overall, VHND provides a good scope for mobilising beneficiaries for adapting key health messages though effective use of Health Communication Strategies.

Female Health Worker also has to attend monthly meeting of Village Health Sanitation and Nutrition Committee as a member, convened by the ASHA as a secretary. There also she can sensitise and put forth her opinions on agenda concerned to social–cultural and environmental determinants of health.

Therefore, it is significant to find out provision, availability, use and barriers related health communication approaches at Anganwadi on VHND and during meeting of VHSC (mostly at Panchayat office).

In recent past (2018), Female Health Workers are armed with TECHO mobile – a smart phone. It is a new technology lead initiative of health department for robust management of data and health information. Female Health Workers also called as FHWs (Female Health Worker) are responsible for collecting and maintaining data from ASHAs and ASHA Facilitators. Further they have to coordinate with PHC level staff for data entry and retrieval. Since it a transition phase, they have to maintain registers, entre data in e-*Mamta* portal and TeCHO mobile too. The findings of the present study may throw light on the experiences of ANMs while using new technology, which may give a guideline for further implementation of new technology for all other frontline Health Functionaries (ASHA, AWW and ASHA Facilitators)

Hence selection of FHW as one of the samples is justified in the present study, which is focused on selected aspects of various Health Communication Strategies for delivering the Health messages and performing various preventive and curative roles and responsibilities.

5.1.4.4 Justification for Selecting of Chief District Health Officer (Chief Medical Officer). There is a District Health Mission in every district and under it functions a District Health Society (DHS) to support its activities. It has a governing body with District collector/ District Magistrate as the chairperson and Chief District Health Officer (also known as Chief Medical Officer) acts as the Chief Executive Officer (CEO) of the NHM.

DHS is responsible for planning and managing all NHM programmes and activities in the District. District Programme Management Unit (DPMU), District Public Health Resource Centre and District Education and Training Centre perform similar functions as their state and national counterparts.

CDHO being the CEO of the governing body of DHS, the officer would be best to evaluate and triangulate the research data gathered from ASHAs, ASHA Facilitators and FHWs in Chhotaudepur district. Being at the higher position in the DHS hierarchy the CDHO would have better insights, planning, experience and expectations in achieving goals of better health and behaviour change through Health Communication.

Therefore, it was felt significant to interview the CDHO and seek his responses to achieve the objectives of the present research.

5.2 Objectives of the study

- 5.2.1 To prepare **Profile of existing Health Facilities** in Chhotaudepur district of Gujarat state.
- 5.2.2 To understand the **Process of Health Communication Strategies** from Chief District Health Officer in Chhotaudepur district of Gujarat state.
- 5.2.3 To seek **Recommendations for Future Health Communication Strategies** from Chief District Health Officer in Chhotaudepur district of Gujarat state.
- 5.2.4 To prepare **Profile of the Selected ASHAs** of Chhotaudepur district of Gujarat state.
- 5.2.5 To find out **Provision** of Health Communication Strategies to the selected ASHAs in Chhotaudepur district of Gujarat state.
- 5.2.6 To find out **the Overall Use** of Health Communication Strategies by the selected ASHAs in Chhotaudepur district of Gujarat state.
- 5.2.7 To study the **differences in Overall Use** of Health Communication Strategies by the selected ASHAs in Chhotaudepur district of Gujarat state with the following variables:
 - a. Block
 - b. Age
 - c. Educational Qualification
 - d. Work Experience
 - e. Occupational Skills
 - f. Training Received
 - g. Knowledge regarding Health Communication Strategies
 - h. Media Use
- 5.2.8 To find out activity-wise **Use of Health Communication Strategies** by the selected ASHAs in Chhotaudepur district of Gujarat state for the following activities:
 - i. Home Visit

- ii. Planning and celebrating VHND (*Mamta day*)
- iii. Visit Health Facilities
- iv. Village Health and Sanitation Committee Meeting
- v. Keeping and informing about records

5.2.9 To study **activity-wise differences in Use** of Health Communication Strategies by the selected ASHAs in Chhotaudepur district of Gujarat state in relation to the following variables:

- a. Block
- b. Age
- c. Educational Qualification
- d. Work Experience
- e. Occupational Skills
- f. Training Received
- g. Knowledge regarding Health Communication Strategies
- h. Media Use

5.2.10 To study the **Perceived Benefits** of Health Communication Strategies expressed by the selected ASHAs in Chhotaudepur district of Gujarat state.

5.2.11 To study **differences in Perceived Benefits** of Health Communication Strategies expressed by the selected ASHAs in Chhotaudepur district of Gujarat state in relation to the following variables:

- a. Block
- b. Age
- c. Educational Qualification
- d. Work Experience
- e. Occupational Skills
- f. Training Received
- g. Knowledge regarding Health Communication Strategies
- h. Media Use

5.2.12 To find out **Barriers** related to Health Communication Strategies expressed by the selected ASHAs in Chhotaudepur district of Gujarat state.

5.2.13 To study **differences in Barriers** related to Health Communication Strategies expressed by the selected ASHAs in Chhotaudepur district of Gujarat state in relation to the following variables:

- a. Block
- b. Age
- c. Educational Qualification
- d. Work Experience
- e. Occupational Skills
- f. Training Received
- g. Knowledge regarding Health Communication Strategies
- h. Media Use

5.2.14 To study the **Overall Need of Additional** Health Communication Strategies expressed by the selected ASHAs in Chhotaudepur district of Gujarat state.

5.2.15 To study **differences in Overall Need of additional** Health Communication Strategies expressed by the selected ASHAs in Chhotaudepur district of Gujarat state for the following variables:

- a. Block
- b. Age
- c. Educational Qualification
- d. Work Experience
- e. Occupational Skills
- f. Training Received
- g. Knowledge regarding Health Communication Strategies
- h. Media Use

5.2.16 To study **Need of Additional Health Communication Strategies** expressed by the selected ASHAs in Chhotaudepur district of Gujarat state for the following activities:

- i. Home Visit
- ii. Planning and celebrating VHND (*Mamta day*)
- iii. Visit Health Facilities

- iv. Village Health and Sanitation Committee Meeting
- v. Keeping and informing about records

5.2.17 To study **activity-wise differences in Need of Additional Health Communication Strategies** expressed by the selected ASHAs in Chhotaudepur district of Gujarat state in relation to the following variables:

- a. Block
- b. Age
- c. Educational Qualification
- d. Work Experience
- e. Occupational Skills
- f. Training Received
- g. Knowledge regarding Health Communication Strategies
- h. Media Use

5.2.18 To study **Provision, Use, Perceived Benefits, Barriers and Needs for Additional Health Communication Strategies** expressed by the Female Health Workers and the ASHA facilitators in Chhotaudepur district of Gujarat state.

5.3 Null Hypotheses of the study

5.3.1 There will be no significant **differences in Overall Use of Health Communication Strategies** by the selected ASHAs in Chhotaudepur district of Gujarat state with the following variables:

- a. Block
- b. Age
- c. Educational Qualification
- d. Work Experience
- e. Occupational Skills
- f. Training Received
- g. Knowledge regarding Health Communication Strategies
- h. Media Use

5.3.2 There will be no significant **differences in activity-wise Use of Health Communication Strategies** by the selected ASHAs in Chhotaudepur district of Gujarat state with the following variables:

- a. Block
- b. Age
- c. Educational Qualification
- d. Work Experience
- e. Occupational Skills
- f. Training Received
- g. Knowledge regarding Health Communication Strategies
- h. Media Use

5.3.3 There will be no significant **differences in Perceived Benefits of Health Communication Strategies** expressed by the selected ASHAs in Chhotaudepur district of Gujarat state with the following variables:

- a. Block
- b. Age
- c. Educational Qualification
- d. Work Experience
- e. Occupational Skills
- f. Training Received
- g. Knowledge regarding Health Communication Strategies
- h. Media Use

5.3.4 There will be no significant **differences in Barriers related to Health Communication Strategies** expressed by the selected ASHAs in Chhotaudepur district of Gujarat state in relation to the following variables:

- a. Block
- b. Age
- c. Education
- d. Work experience
- e. Occupational skills

- f. Training received
- g. Knowledge regarding Health Communication Strategies
- h. Media use

5.3.5 There will be no significant **differences in Overall Need of Additional Health Communication Strategies** among the selected ASHAs in Chhotaudepur district of Gujarat state in relation to the following variables:

- a. Block
- b. Age
- c. Educational Qualification
- d. Work Experience
- e. Occupational Skills
- f. Training Received
- g. Knowledge regarding Health Communication Strategies
- h. Media Use

5.3.6 There will be no significant **differences in activity-wise Need of Additional Health Communication Strategies** among the selected ASHAs in Chhotaudepur district of Gujarat state in relation to the following variables:

- a. Block
- b. Age
- c. Educational Qualification
- d. Work Experience
- e. Occupational Skills
- f. Training Received
- g. Knowledge regarding Health Communication Strategies
- h. Media Use

5.4 Assumptions of the study

5.4.1 Under NHM, ASHAs, ASHA Facilitators and Female Health Workers of Chhotaudepur district are provided with Health Communication Strategies for performing their prescribed roles under NHM.

5.4.2 ASHAs, ASHA Facilitators and Female Health Workers of Chhotaudepur district will express their use, perceived benefits, barriers and need of additional Health Communication Strategies under NHM.

5.4.3 The selected ASHAs may vary according to the selected variables for their use, perceived benefits, barriers and need of additional Health Communication Strategies under NHM in Chhotaudepur district of Gujarat State.

5.5 Delimitations of the study

5.5.1 The present study is delimited to the data received from District Panchayat Office, Chief District Health Officer, Female Health Workers, ASHA Facilitators and ASHAs from all six blocks, regarding selected aspects of Health Communication Strategies under NHM in Chhotaudepur District, Gujarat.

5.5.2 Responses of the ASHAs are delimited to use and need of additional Health Communication Strategies for prescribed Five activities (*i.e.* Home visit, planning and celebrating Village Health and Nutrition Day, visit health facilities, Village Health and Sanitation Committee meeting and maintaining and informing records) in ASHA guideline, perceived benefits and barriers related to Health Communication Strategies.

5.5.3 Responses of ASHA facilitators and Female Health Workers are delimited to provision, use, perceived benefits, barriers and need of additional Health Communication Strategies.

5.6 Explanation of Terms

5.6.1 Health Communication Strategies

Combination of Health Communication tools–techniques (interpersonal, mid and mass media) broadly known/mentioned as IEC and Health Information Technology system (TeCHO mobile, E–*Mamta*, SATCOM *etc.*) broadly known/mentioned as ICT used under NHM to create awareness, promote, motivating, escorting, mobilising community people for availing health services, bringing desirable behavioural change, capacity building and strengthening health machinery and Health Management Information System across all stakeholders.

5.7 Operational Definitions

5.7.1 Provision of Health Communication Strategies

Availability of Health Communication Strategies for the functioning of ASHAs, ASHA Facilitators and Female Health Workers under NHM in Chhotaudepur district of Gujarat State.

5.7.2 Use of Health Communication Strategies

In the present research, it means 'use of Health Communication Strategies for performing the enlisted activities by ASHAs, ASHA Facilitators and Female Health Workers provided /available under NHM in Chhotaudepur district of Gujarat State.

5.7.3 Perceived Benefits of Health Communication Strategies

It refers to the perception towards benefits of Health Communication Strategies under NHM expressed by the selected ASHAs, ASHA Facilitators and Female Health Workers in Chhotaudepur district of Gujarat State.

5.7.4 Barriers related to Health Communication Strategies

It means barriers expressed by ASHAs, ASHA Facilitators and Female Health Workers with regards to various aspects related to Health Communication Strategies under NHM in Chhotaudepur district of Gujarat State.

5.7.5 Need for Additional Health Communication Strategies

This includes suggestions and requirements expressed by the selected ASHAs, ASHA Facilitators and Female Health Workers for improvements in Health Communication Strategies under NHM in Chhotaudepur district of Gujarat State.

5.8 Limitations

National Health Mission is an umbrella programme governed and implemented on decentralised, PPP, local target-based approach by Health and Family Welfare department through Intersectoral Coordination and convergence among state departments like Women and Child Welfare Department, Department of Water supply and Department of Information and Communications well Non-Government Organisations and other stakeholders. Health Promotion and Service

Delivery is addressed by using Strategic Health Communication plan including interpersonal, mid media and mass media Strategies which may vary across the state and in the selected district.

Therefore, the present study has limitation to responses of Chief District Health Officers and grass-root level functionaries (ASHA Facilitators and Female Health Workers) and ASHAs towards provision, use, perceived benefits, barriers and need of additional Health Communication Strategies would be according to their exposure, training and their characteristics.

5.8 Methodology

5.8.1 Feasibility Study

The feasibility study was carried out aiming at preparing profile of ASHAs and Development Communication Approaches used by them while performing their duties, in two districts, which were selected purposively *i.e.* Vadodara and Chhotaudepur. An In-depth interview schedule was developed. Data collection was done during June–July 2017 personally by the researcher. The ASHAs from these districts were approached through purposive and snow ball sampling techniques. The final sample consisted of 12 Urban, 9 Rural and 9 Tribal ASHAs. Permission from respective district level health departments were taken in advance and ASHAs were asked for their consent to be part of the feasibility research.

The findings highlighted that ASHAs were performing their roles and responsibilities using limited communication materials/IEC strategies available with them. These IEC materials (*i.e.* Mamata card, *Mamta* diary and register) were provided by Government under NHM. ASHAs would be able to perform in a better way if provided with most suitable and appropriate Development Communication Materials to them for different content on health. This implies that ASHAs should be studied in terms of training received, provision, use, perceived benefits and barriers with reference to Health Communication Strategies. The ASHAs and other Health Care providers (ASHA Facilitators, Female Health Workers, Medical Officers, Block Health

Officers *etc*) should be approached for their need and expectations for the type and variety of IEC.

Hence a need was felt for In-depth research to understand status of Health Communication Strategies in Chhotaudepur district in general and ASHAs in particular.

5.8.2 Selection of Area and Population

Chhotaudepur is one of the 14 tribal districts; situated in the middle-east part of Gujarat. The selected tribal district is divided into six blocks namely Chhotaudepur, Pavi Jetpur, Kavant, Bodeli, Nasvadi and Sankheda, here Chhotaudepur block acts as the district headquarter. ASHAs, ASHA facilitators, Female Health Workers (FHWs) and Chief District Health Officer from Chhotaudepur district of Gujarat state, comprised Population of the study.

(A) Methodology for Survey

5.8.3 Sampling Unit and Sampling Frame

For the purpose of the survey, ASHAs were identified as a primary sampling unit. In total 1102 ASHAs from six Blocks of Chhotaudepur district constitute the sampling frame.

5.8.4 Sample and Sample Selection Techniques

For the present research, Multi-Stage sampling technique was planned to draw the required sample.

At Stage-1, it was decided to take all six blocks to have a complete overview of the tribal district of Chhotaudepur. The block-wise list of 45 PHCs along with 1102 appointed ASHAs was collected from District Panchayat Office, Chhotaudepur by the researcher herself in February 2019.

Using Simple Random Sampling method, PHCs were selected from each block at stage-2. The researcher had followed ethical aspects of both means, those of health department, the government of Gujarat and the Maharaja Sayajiro University of Baroda, Vadodara. Therefore, permission was taken from Family and Health care

department, Government of Gujarat, Gandhinagar, Chief District Health officer, Chhotaudepur, and respective Block Health Officers for conducting the present study.

Further, at Stage-3 ASHAs, were selected randomly until the desired sample size was achieved.

Finally, in total 326 ASHAs were selected from the six blocks namely Chhotaudepur, Pavi Jetpur, Kavant, Bodeli, Nasvadi and Sankheda of Chhotaudepur District of Gujarat state.

5.8.5 Construction of the Survey tool

A questionnaire was designed to survey ASHAs. The tool consisted of five sections in line with the specific objectives of the present research (Appendix-3). It was primarily developed in English and then translated in Gujarati. Below table describes in detail the questionnaire used for the ASHAs.

Table 107

Objective wise Description of the Tools Used for Survey

Part	Objective	Content	Tool
A.	To prepare Profile of the selected ASHAs	Personal information, Work-related information, Media Use Occupational Skills Training received under NHM Knowledge regarding Health Communication Strategies	Questionnaire & Information Schedule Rating scale Checklist Knowledge Test
B.	To find out Provision of Health Communication Strategies by the ASHAs	Sources of Information Provision of Health Communication Strategies under NHM	Checklist Checklist
	To find out Use of Health Communication Strategies by the ASHAs	Use of Health Communication Strategies during; Home visit, Planning and celebrating VHND (<i>Mamta</i>	Checklist

		day), Visit to Health Facilitates, Village Health & Sanitation Committee Meeting, Keeping and informing about records	
C.	To study the Perceived Benefits of Health Communication Strategies by the ASHAs	Perceived benefits of Health Communication Strategies	Rating Scale
D.	To find out Barriers Related to Health Communication Strategies faced by the ASHAs	Barriers Related to Health Communication Strategies	Rating Scale
E.	To study the Need for Additional Health Communication Strategies	Special Training received related to Health Communication Strategies Need for additional Health Communication Strategies for; Home visit, Planning and celebrating VHND (<i>Mamta</i> day), Visit Health Facilitates, Village Health & Sanitation Committee Meeting, Keeping and informing about records	Checklist Checklist

5.8.6 Validity of the Survey tool

The questionnaire was validated by the eleven selected experts from allied fields. The validators were requested to review and give their comments as well as critical remarks for the content, framing of questions/statements, clarity of language and response system used in the questionnaire. The researcher incorporated suggestion in the research tool. However, no major suggestions were received.

5.8.7 Pre-testing of the Research tool

The questionnaire was pretested with the ASHAs to check the clarity of language (Gujarati), response system and time taken for filling up the tool. A brief note was included and a few difficult terms were replaced in the tool after pretesting.

5.8.8 Procedure of Data collection

Block Health Officers and then Medical Officers were contacted for permission and to fix up meetings with ASHAs at the selected PHCs. ASHAs and ASHA Facilitators were contacted for deciding time. The ASHAs were informed about the objectives of the research and the importance of their participation and the consent form. The questionnaire was filled up by the ASHAs in a group meeting with the assistance/help of the researcher. It took almost two hours on an average to fill up the tool. Data collection was done personally by the researcher from 326 ASHAs during January–April months of 2019.

5.8.9 Scoring and Categorisation of the Data

5.8.9.1 Scoring and Categorisation of the Variables.

Table 108

Categorisation of Selected Variables of the ASHAs

Variable	Basis	Range	Categories
Block	–	–	Chhotaudepur
	–	–	Sankheda
	–	–	Bodeli
	–	–	Nasvadi
	–	–	Pavi Jetpur
	–	–	Kavant
Age	Mean and Above Mean	35 to 62 years	Older
	Below Mean	21 to 34 years	Young
Educational Qualification	–	–	Primary
	–	–	Secondary
	–	–	Higher Secondary
	–	–	Graduation
Work Experience	Mean and Above	7 .1 to 15 years	More Work Experience
	Below Mean	7 years and below	Less Work Experience
Media Use	Above Mean	2.10 and above	High
	Mean	1.05–2.00 hrs	Average
	Below Mean	1.00 and below	Low
Occupational Skills	Above Mean	112 and above	Excellent
	Mean	98–111	Moderate
	Below Mean	97 and below	Poor
Training Received	Completely trained for all modules with a refresher course	–	Completely trained
	Not received training for anyone/more modules or refresher course	–	Partially trained
Knowledge regarding HCS	Above Mean	13 to 20	High
	Mean	7 to 12	Medium
	Below Mean	1 to 6	Low

5.8.9.2 Scoring and Categorisation of the other Variables.

Table 109

Categorisation of the Other Variables of the ASHAs

Variable	Basis	Categories
Marital status	–	Married
	–	Widow
	–	Divorcee
	–	Separated
	–	Unmarried
Caste	–	General
	–	SC
	–	ST
	–	OBC
	–	Others
Total Monthly Family income	5001 and above	High Monthly Family Income
	500 to 5000	Low Monthly Family Income
Number of Family members	6 and above	More number of Family members
	5 and below	Less number of Family members
Type of Family	–	Nuclear family
	–	Joint family
	–	Extended family
Number of assigned Villages	One (1)	One (1) village
Population covered	Two (2) and more	Two (2) and more villages
	1032 and above	Large population to be covered
	1031 and below	Small population to be covered
Number of Households in the assigned area	177 and above	More number of Households in assigned area
	176 and below	Less number of Households in assigned area
Number of Working hours	181 hours and above	More number of working hours
	180 hours and below	Less number of working hours

5.8.9.3 Provision and Use of Health Communication Strategies.

5.8.9.3.1 Sources of Information. To measure the sources of information used by the ASHAs, a classified checklist was developed, wherein total 31 Health Communication Strategies were given in four categories *viz*, 14– Print and graphic media, 13– Electronic and new media, 3–Folk media and 1– others. Based on the number of Sources of Information used by the ASHAs, categorisation was done as follows:

Table 110

Categorisation of Sources of Information

Variable	Basis	Range	Categorisation
Sources of Information	Mean and Above	6 and above	More sources of Information
	Below Mean	5 and below	Less sources of Information

5.8.9.3.2 Provision of Health Communication Strategies Under NHM.

The same classified checklist was used to find out a provision of Health Communication Strategies for selected work, wherein total 31 Health Communication Strategies were given in four categories *viz*, 14– Print and graphic media, 13– Electronic and new media, 3–Folk media and 1–others. Based on the number provision and use of Health Communication Strategies by the ASHAs, categorisation was done as follows:

Table 111

Categorisation of the Provision of Health Communication Strategies

Variable	Basis	Range	Categorisation
Provision of Health Communication Strategies	Mean and Above	11 and above	More provision
	Below Mean	10 and below	Less provision

5.8.9.3.3 Use of Health Communication Strategies. To study the use of Health Communication Strategies by the ASHAs, a classified checklist was prepared, wherein total 31 Health Communication Strategies were listed in four categories *viz*, 14– Print and graphic media, 13– Electronic and new media, 3–Folk media and 1– others.

The checklist was useful in assessing the overall and activity-wise use of Health Communication Strategies. Following table 112 describes the total number of items under each sub-section with minimum and maximum obtainable scores for their overall as well as activity-wise use of Health Communication Strategies.

Table 112

Minimum and Maximum Obtainable Scores of Overall and Activity-wise Use of Health Communication Strategies

Use of Health Communication Strategies	No. of Items	Minimum obtainable score	Maximum obtainable score
Overall	155	0	155
Home visit	31	0	31
Planning and celebrating VHND (<i>Mamta day</i>)	31	0	31
Visit Health Facilitates	31	0	31
Village Health and Sanitation Committee Meeting	31	0	31
Keeping and informing about records	31	0	31

The maximum obtainable scores for overall use was 155 and for activity wise use was 31, whereas for overall and activity wise use, minimum obtainable scores was zero. Based on the overall and activity-wise scores obtained for the use of Health Communication Strategies by the ASHAs, they were categorised as follows:

Table 113

Categorisation of Overall and Activity-wise Use of Health Communication Strategies

Variables	Basis	Range	Categorisation
Overall Use	Mean and Above	38 and above	More overall use
	Below Mean	37 and below	Less overall use
Home visit	Mean and Above	9 and above	More use
	Below Mean	8 and below	Less use
Planning and celebrating VHND (Mamta day)	Mean and Above	9 and above	More use
	Below Mean	8 and below	Less use
Visit Health Facilitates	Mean and above	8 and above	More use
	Below Mean	7 and below	Less use
Village Health and Sanitation Committee Meeting	Mean and above	7 and above	More use
	Below Mean	6 and below	Less use
Keeping and informing about records	Mean and above	6 and above	More use
	Below Mean	5 and below	Less use

5.8.9.4 Perceived Benefits of Health Communication Strategies. To check the Perceived Benefits of Health Communication Strategies by ASHAs, a rating scale was developed. Review of related literature, findings of the feasibility study and researcher's personal on field observations helped in the framing of statements under this section. The Five-point scoring pattern was used for the rating of the total 23 statements. Therefore, the Maximum Obtainable score was 115 and Minimum obtainable score was 23 in the section namely 'Perceived benefits of Health Communication Strategies'. Further, categorisation was done by considering the range and basis given in the table 114.

Table 114

Categorisation of scores of Perceived Benefits of Health Communication Strategies

Variable	Range	Categorisation
Perceived Benefits of Health Communication Strategies	96 and above	Extremely beneficial
	76–95	Moderately beneficial
	75 and below	Least beneficial

Further, to find out the overall and item-wise perceived benefits by ASHAs, intensity indices were also measured. The table 115 shows the categorisation of Intensity Indices for perceived benefits of Health Communication Strategies.

Table 115

Range of Intensity Indices for Perceived Benefits of Health Communication Strategies

The extent of Perceived Benefits	Range of Intensity Indices
Extremely beneficial	4.2–4.7
Moderately beneficial	3.6–4.1
Least beneficial	3.0–3.5

5.8.9.5 Barriers related to Health Communication Strategies. A five-point rating scale was developed to measure the barriers related to Health Communication Strategies expressed by the ASHAs. For this rigorous review of literature and findings of the feasibility study were used as a reference for preparing tool covering five aspects of Health communication Strategies *viz.* their Features, availability and accessibility, characteristics of authorities, beneficiaries and personal. In total 29 statements were prepared for which Five-point scoring pattern was used.

In this section, the maximum obtainable score was 145 and minimum obtainable score was 29. The following table 116 guided the researcher for categorisation of barriers expressed by the ASHAs for Health Communication Strategies.

Tale 116

Categorisation of Scores of Barriers Related to Health Communication Strategies

Variable	Range	Categorisation
Barriers of Health Communication Strategies concerning selected aspects	118 and above	Extreme level of barrier
	71–117	Moderate level of barrier
	70 and below	Least level of barrier

To find out the overall and item-wise Barriers faced by the ASHAs, intensity indices were measured. Following is the categorisation of Intensity Indices:

Table 117

Range of Intensity Indices for Barriers Related to Health Communication Strategies

Extent of Barriers	Range of Intensity Indices
Extreme level of barrier	2.9–4.0
Moderate level of barrier	1.7–2.8
Least level of barrier	0.5–1.6

5.8.9.6 Need for Additional Health Communication Strategies. A classified checklist of Health Communication Strategies was used to assess the need of additional Health Communication Strategies for selected work, wherein total 31 Health Communication Strategies were given in four categories *viz*, 14– Print and graphic media, 13– Electronic and new media, 3–Folk media and 1–others.

Through the checklist, it was possible to find out the overall and activity-wise need for additional Health Communication Strategies. The following table shows the number of items under each activity performed by the ASHAs, minimum and maximum possible scores expressing their overall and activity-wise need of additional Health Communication Strategies under NHM.

Table 118

Minimum and Maximum Obtainable Scores of Need for Additional Health

Communication Strategies

Need for Additional Health Communication Strategies	No. of Items	Minimum Obtainable Score	Maximum Obtainable Score
Overall	155	0	155
Home visit	31	0	31
Planning and celebrating VHND (<i>Mamta day</i>)	31	0	31
Visit Health Facilitates	31	0	31
Village Health and Sanitation Committee Meeting	31	0	31
Keeping and informing about records	31	0	31

Based on the scores of the need for additional Health Communication Strategies expressed by the respondents for each work, they were categorised as follows in table 119:

Table 119

Categorisation of Overall and Activity-wise Need of Additional Health Communication Strategies

Variables	Basis	Range	Categorisation
Overall need	Mean and Above	44 and above	More need
	Below Mean	43 and below	Less need
Home visit	Mean and above	10 and above	More need
	Below Mean	9 and below	Less need
Planning and celebrating VHND (Mamta day)	Mean and above	10 and above	More need
	Below Mean	9 and below	Less need
Visit Health Facilitates	Mean and above	8 and above	More need
	Below Mean	7 and below	Less need
Village Health and Sanitation Committee Meeting	Mean and above	9 and above	More need
	Below Mean	8 and below	Less need
Keeping and informing about records	Mean and above	8 and above	More need
	Below Mean	7 and below	Less need

5.8.10 Plan of Statistical Analyses of the Data

Various appropriate and meaningful statistical measures were planned in consultation with a statistician for comprehension, clarity, comparison and interpretation of the data as shown in following table. For validation and consistency of survey data, the data entry was done in CSPro 6.1 and SPSS 20.0 was used for data analysis.

Table 120*Plan of Statistical Analyses*

Purpose	Statistical Measures
Personal Information	Frequencies and Percentages
Work-Related information	Frequencies and Percentages
Media Use	Frequencies and Percentages
Occupational skills	Percentages
Training Received	Frequencies and Percentages
Knowledge about Health Communication strategies	Frequencies and Percentages
Provision of Health Communication Strategies	Frequencies and Percentages
Use of Health Communication Strategies	Frequencies and Percentages, T-test, ANOVA, Tukey's HSD
Perceived Benefits of Health Communication Strategies	Frequencies and Percentages, T-test, ANOVA, Tukey's HSD Intensity Indices
Barriers related to Health Communication Strategies	Frequencies and Percentages, T-test, ANOVA, Tukey's HSD Intensity Indices
Need of Additional Health Communication Strategies	Frequencies and Percentages, T-test, ANOVA, Tukey's HSD

B) Methodology for Focus Group Discussions and In-Depth Interview

Focus Group Discussions and In-Depth Interview facilitated researcher to gather in-depth, comprehensive and descriptive responses from the groups of respondents. These helped in consolidating the complete scenario of the phenomena under study. Qualitative data enhance research finding as they can be used in triangulation.

Focus Group Discussions with ASHAs, ASHA Facilitators and Female Health Workers helped in studying provision, use, perceived benefits, barriers and needs for additional Health Communication Strategies. Further In-Depth Interview was planned with the CDHO to study the process involved in planning, executing and monitoring of Health Communication Strategies.

5.8.11 Sampling unit and Sampling Frame

To fulfil requirements of FGDs; ASHAs, ASHA Facilitators and Female Health Workers and for In-Depth Interview, Chief District Health Officer were identified as Sampling units.

In the present investigation 1102 ASHAs, 118 ASHA Facilitators, 306 Female Health Workers constitute the sampling frame for FGDs. Each district has one CDHO, so the officer became sample cum sample frame.

5.8.12 Sample Size and Selection Technique

From each sample frames, the selection of the sample was done purposively based on the permission and appointment given by the respective Block Health Officer and Chief District Health Officer. The BHOs helped the researcher in the process of sample selection. To fulfil the requirements of present research data following criteria were shared with the respective BHO in advance:

- Those who are vocal and able to communicate their ideas, viewpoints and actively participate in the FGD.

- Those having an understanding of Village Healthcare system and therefore can express health concerns for the same.
- Those who can deliberate and discuss selected aspects of Health Communication Strategies viz. provision, use, benefits, barriers and needs.
- Those with personal willingness and interest in participation in FGD.

The total 74 ASHAs, 31 ASHA Facilitators and 34 FHWs participated in the Focus Group Discussions held across the district, the blocks wise sample is presented in the table 121.

Besides these, one In-Depth Interview was conducted with Chief District Health Officer.

5.8.12 Research tools for Focus Group Discussions and In-Depth Interview

Following tools were developed by the researcher for specific participant groups to efficiently elicit qualitative data.

Table 121

Objective-wise Description of the Tools

Objective	Participants	Tools
Profile, Provision, Use, Perceived benefits, Barriers, Need of Additional HCS	ASHAs	FGD theme guide (Appendix-5)
Provision, Use, Perceived benefits, Barriers, Need of Additional HCS	ASHA Facilitators and Female Health Workers	FGD theme guide (Appendix-6)
Existing health facilities, Process of Health Communication (Planning, executing, monitoring and recommendation for future HCS)	Chief District Health Officer	Proforma & In-Depth Interview Schedule (Appendix-7)

5.8.13 Process for conducting FGDs and an In-Depth Interview

5.8.13.1 Conducting FGDs. As per the appointment given by the Block Health Officer, investigator coordinated with the group members. The BHOs were kind enough to facilitate in fixing up the time and venue to conduct the Focus Group Discussions.

In each from six blocks, two FGDs were conducted *i.e.* one with the group of ASHAs and one with the combined groups of ASHA Facilitators and Female Health Workers. Therefore, in sum 12 FGDs were conducted in the whole of the District.

The BHOs of Chhotaudepur, Kavant and Nasvadi felt it convenient to hold FGDs at their respective Block Health Offices for all groups. In two blocks namely Bodeli and Pavi Jetpur the FGDs were organised at Tadkachala and Bar PHCs respectively for all groups (ASHAs, ASHA Facilitators and FHWs). Whereas Sankheda BHO planned FGD with ASHAs at Bhatpur PHC and with ASHA Facilitators and FHWs it was held at Jalaram Mandir, Sankheda. Holding and facilitating the FGD was an enriching experience. Proper sitting, light, ventilation; documentation facilities like video camera, audio recorder and consent cum attendance sheet were arranged at the venue beforehand. The researcher herself facilitated the group discussion.

All the groups were familiarized properly to the subject of research and the purpose of holding focus group discussion. They were also explained about the basic rules/decorum of FGD like everyone has an equal chance to speak/share, respecting one another's viewpoints/feelings/ideas, not to cut/interrupt while any participant is speaking *etc.* Consent was sought from the interested Group members. Interestingly there was not a single person who did not give her consent there were more members who were enthusiastically present than expected by the Investigator. Therefore, they all were involved in FGDs. Then facilitator, initiated the discussion by putting up questions/points of discussion referring to the Theme-guides prepared for each set of groups. FGDs with ASHAs took almost 35–55 mins, whereas FGD with the combined group of ASHA Facilitators and FHWs lasted for 20–35 mins.

5.8.13.1 Conducting an In-depth Interview. An appointment was taken well in advance for arranging an in-depth interview with the Chief District Health Officer. It took almost 1 hour and 10 mins to elicit all the answers as planned under the interview schedule. The interview was documented electronically as well as manually to keep record and reference for data analysis.

FGDs and In-depth Interview were done personally by the researcher during March 2019–April 2019.

5.8.13 Content Analysis and Interpretation of the Data

As the first step of analysis of FGDs and in-depth interview, the researcher prepared transcripts from recordings and running notes. Verbatims were read–reread for enlisting trending sub–themes under themes based on the objectives of the study. Then after, comparative tables of sub–themes under each theme were prepared. Responses of the participants are reported in the finding and discussion chapter in the boxes containing verbatims according to themes and sub–themes derived.

5.8.14 Ethical Aspects of the Study

During the study, the investigator had considered and followed the necessary ethical measures. First and foremost, important permission for data collection was taken from the State Health and Family Welfare Department, Gandhinagar and Chief District Health Officer, Chhotaudepur.

Moreover, all the tools used under both qualitative and quantitative approaches were validated by in total of 13 subject experts in their field of knowledge.

The investigator had taken written consent from all respondents before executing questionnaire, Focus–Group Discussion and Interview.

5.9 Major findings

5.9.1 Profile of Health Facilities in Chhotaudepur District

- According to District Panchayat Office, Chhotaudepur District (2019), there existed one district hospital. It was found that there were 2 Community Health

Centres, 45 Primary Health Centres, out of which 22 PHCs were open all the time means 24*7 for the people in need of health care and facilities. There were in total of 310 Sub centres in approached areas. There did not exist any ayurvedic dispensary in the tribal district. There were 1182 operational Aanganwadi centres in Chhotaudepur district.

- The district health department was headed by the Chief District Health Officer (CDHO) and appointed for full time. Whereas, the post of IEC Officer was vacant. There were six BHOs, twenty-four Medical Officers (allopathy), nine Medical Officers (AYUSH) appointed. There were 75 nurses, 48 Laboratory Technician, 45 Pharmacist and in total 12 office staff in Chhotaudepur district. At subcentres in the district, there were 306 Male Health Workers and same 306 Female Health Workers available.
- In the whole tribal district, there were 118 ASHA Facilitators and 1117 ASHAs, also 1089 Aanganwadi Workers (AWWs) were appointed.
- There were total 50 PHCs in Chhotaudepur district. Forty-eight PHCs were electrified except two PHCs of Kavant block.
- There were seven Televisions in Kavant, six in Bodeli and five in Sankheda, whereas there was not a single television existed in any PHCs in Chhotaudepur, Pavi Jetpur and Nasvadi Blocks. In total 68 computers and 36 laptops were available in the district and 25 PHCs covering Sankheda, Kavant, Bodeli and Nasvadi blocks had internet connectivity whereas no PHCs of Pavi Jetpur and Chhotaudepur had internet connectivity.
- Total 247 TeCHO mobiles and 243 CUG cards were made available in all five blocks except Kavant. The district has created facilities covering all blocks for watching SATCOM programme, therefore 34 such sessions were possible in a month usually on Monday, Wednesday or Saturday.
- Kavant block had comparatively more facilities of graphic and print media, may be due to unavailability of electricity in two of the PHCs.
- All the blocks had availability of diary, registers, health cards, banner and hanging mobiles.

- CDHO also shared about hired services taken from folk troops to create awareness among communities. The researcher observed inconsistency in the data provided by the District Programme Management Unit and responses of the CDHO, ASHAs, ASHA Facilitators and Female Health Workers.

5.9.2 Process of Health Communication Strategies under NHM

- The State IEC team and others (Government departments, NGOs and Consultants) were involved in planning.
- Health Communication strategies were received in two ways, sometimes hard copies/ ready-printed copies were received at the district level, whereas sometimes soft copies were sent from the district from Gandhinagar (State office). In such a situation, the production process was done at the district level according to the direction of the District Development Officer.
- Distribution and supply chain management up to PHC, community and frontline health workers was managed from the District Panchayat Office under guidance of District IEC officer. Stock registers were maintained at different levels but not uniformly.
- There were no systematic and documented proofs shared by the CDHO regarding monitoring of Health Communication Strategies. However, there was mention of occasional monitoring of Health Communication Strategies.
- Need for innovative, interactive, Audio-visual and dramatized Health Communication strategies was stressed by the CDHO for Chhotaudepur, tribal district of Gujarat.

As a concluding remark, the CDHO suggested following the thumb rule – ‘One message at a time’ for addressing the determinants of health. Treatment of message presentation is a very important ingredient of the message design process.

- Tribal people can be influenced by emotional appeal. Media planners should pay attention to the psychology of local people. Others referencing and frequency of reminder messages can be fruitful. Use of local language and

graphics depicting local culture can lead to successful communication in Health programmes.

5.9.3 Profile of ASHAs

5.9.3.1 Variables under study.

- Little more than half (55.2%) of ASHAs belonged to young age, had received education up to secondary level (46.6%), having high media use (40.2%), possessing excellent occupational skills (47.5%) and had medium knowledge about Health Communication Strategies (56.75%).
- Very high majority (89.6%) of the ASHAs had received complete training *i.e.* all seven modules and refresher course; 64.4 per cent of the ASHAs possessed more work experience as an ASHA under NHM.

5.9.3.2 Personal information of the ASHAs.

- Almost all the ASHAs found themselves proficient in Gujarati language and majority were also proficient in Hindi language.
- Very high majority (91.1%) were married.
- Majority (68.4%) ASHAs belonged to Schedule Tribe caste.
- Total monthly family income for majority of the ASHAs (66.3%) were comparative higher than their counterparts.
- Little more than half *i.e.* 53.1 % of the ASHAs had more members in their families.
- Little more than half *i.e.* 56.1 % of the ASHAs lived in joint family.

5.9.3.3 Work related information of the ASHAs.

- Very high majority (83.7%) of the ASHAs were assigned one village, where in majority *i.e.* 58.6 per cent and 56.7 % of the total ASHAs had to cover comparative small size population and a less number of families respectively for their work.
- Almost three fourth of the ASHAs visited to PHC and CHC for medical advice, check-up of ANC mothers and general patients.

- A Very high majority (90.1%) of the ASHAs approached to CHC followed by PHC by 76.1 % for conducting delivery of registered pregnant women.
- A Very high majority (92.3%) of the ASHAs used 108-ambulance followed by majority (65.2%) ASHAs reached to her destination by walking on foot.

During FGDs it was expressed that ASHAs have found improvements both personally and professionally. They have acquired skills and knowledge, which have empowered them to work efficiently in their allotted village area. At personal front ASHAs have started feeling empowered in terms of financial, social, family and health aspects.

ASHAs have reported significant change in perspectives of family, community and government health organisations towards themselves. Since majority of the ASHAs have joined duties for more than eight years, they have established their positive image amongst beneficiaries. Their tireless, selfless, constant and dedicated efforts in health care service delivery for community people have earned them respect, trust and credibility. It was reported by the ASHAs that Government offices and other NGOs now rely upon ASHAs for smooth rollout of their activities and programmes in communities.

5.9.4 Sources of Information

- More than half (58.3%) of the ASHAs had more sources of information for seeking health and health programmes related information.

5.9.5 Provision of Health Communication Strategies

5.9.5.1 Provision of Health Communication Strategies to ASHAs.

- Little more than half (51.2%) of the ASHAs were provided with less number of Health Communication Strategies which can be used for performing their duties.
- Very high majority of ASHAs, 93.6 %, 92.9 % and 87.7 % reported that they were provided with *Mamta card* (health card), ASHA diary and Chart/posters respectively.

- High majority of ASHAs were provided with Registers (80.1%) and with Leaflets (73.9%) too.
- Flipbook on *“Janani Suraksha Yojana”*, Chart/Posters on anaemia, ante-natal and post-natal care, breast feeding, new born care at home, sign and symptoms of high-risk baby *etc.* for explaining to new mothers and their families and Chart/posters on smoking-tobacco addiction, leprosy *etc.* were provided to the ASHAs.
- ASHAs mentioned about wall paintings and display of chart/posters at public places and Aanganwadi respectively.

5.9.5.2 Provision of Health Communication Strategies to ASHA Facilitators.

- ASHA Facilitators mentioned provision of flipbook on pregnancy and vaccination; posters on cancer; posters and flipbooks on content related to mother and child health care; small size posters for leprosy.

5.9.5.3 Provision of Health Communication Strategies to Female Health Worker.

- FHWs were provided with Media-mix consisting; graphic media like chart, poster, flipbook, flipcharts and booklets on specific diseases, electronic media like SATCOM, PA system for announcements, mobile phones–TeCHO mobile, with pre-installed presentations *etc.*

5.9.6 Use of Health Communication Strategies

5.9.6.1 Overall Use of Health Communication Strategies by the ASHAs.

- Overall, 41.7 % of the ASHAs used more number of Health Communication Strategies.
- Overall ASHAs having more work experience, excellent occupational skills and belonging to Pavi Jetpur used more number of Health Communication Strategies than their counterparts.

5.9.6.2 Use of Health Communication Strategies during Home visit.

- Little more than half (56.1%) of the ASHAs used less number of Health Communication Strategies during Home visit.
- High majority *i.e.* 89.3 % and 83.4 % of the selected ASHAs used *Mamta* Card (Health card) and ASHA diary respectively. Register (69.9%), Chart/Poster (66.6%) and Leaflets (61.7%) were also used by the respondents.
- There were significant differences among the ASHAs with their work experience and belonging to different blocks for their use of Health Communication Strategies during Home visit. The ASHAs having more work experience and from Pavi Jetpur used significantly more Health Communication Strategies than those belonging to Bodeli, Nasvadi and Kavant.

5.9.6.3 Use of Health Communication Strategies during planning and celebrating VHND (*Mamta* day).

- Overall higher use of Health Communication Strategies was expressed by little higher than half (51.5%) of the ASHAs during *Mamta* day.
- High majority of the selected ASHAs used *Mamta* card (health card) (94.8%), ASHA diary (90.8%) and register (86.8%) followed by chart/poster (76.7%), mobile phones (62.6%) during planning and celebration of *Mamta* day.
- The ASHAs having more work experience used significantly more number of Health Communication Strategies than their counterparts with less work experience.
- Significant differences were seen in use of Health Communication Strategies by the ASHAs according to their blocks and occupational skills. The mean use of Health Communication Strategies for planning and celebrating VHND by ASHAs from Pavi Jetpur was significantly higher than those from Bodeli, Nasvadi and Kavant.

5.9.6.4 Use of Health Communication Strategies for Visit to Health Facilities.

- Higher percentages of the ASHAs (63.8%) used less number of media.
- High majority *i.e.* 82.8 %, 78.5 %, 74.5 %, 73.6 % and 68.7 % of the selected ASHAs used ASHA diary, register, mobile phone, *Mamta* Card (Health card) and chart/poster respectively.
- Significant differences were revealed related to use of HCS for 'Visit to Health facilities' by ASHAs with respect to their blocks and knowledge regarding HCS. The ASHAs belonging to Pavi Jetpur used significantly more Health Communication Strategies than those from Bodeli and Sankheda and similarly the ASHAs with medium knowledge used more Health Communication Strategies their counterpart with High Knowledge.

5.9.6.5 Use of Health Communication Strategies for VHSC meeting.

- Higher percentages of the ASHAs (62.0%) used less number of Health Communication Strategies for VHSC meetings.
- High majority of the ASHAs used register (85.9%), ASHA diary (67.2%), mobile phone (70.6%), chart/poster (57.1%) and *Mamta* card (47.2%) for VHSC meeting.

5.9.6.6 Use of Health Communication Strategies for keeping and informing about records.

- Majority (62.9%) of the ASHAs used less number of Health Communication strategies.
- High majority of the ASHAs used register (91.4%), ASHA diary (88.9%), mobile phones (81.6%), *Mamta* Card (56.1%) and CUG card (39.3%) for maintaining and informing about records and birth–death details of community area.
- Significant differences were observed in ASHAs according to their blocks and occupational skills in use of Health Communication Strategies. The ASHAs belonging to Nasvadi possessing excellent occupational skills used more

Health Communication Strategies than those from Chhotaudepur, Bodeli and Kavant blocks and having moderate level of occupational skills.

Survey and FGDs findings revealed that ASHAs used *Mamta* card, ASHA Diary and registers for most of their duties.

5.9.6.7 Use of Health Communication Strategies by the ASHA Facilitator.

- During home visits and on Village Health and Nutrition Day, they used *Mamta* card posters/charts, banners, flip book and their own experiences to explain beneficiaries, their families to educate them regarding high risk signs and symptoms of pregnancy through comparative pictures.

5.9.6.8 Use of Health Communication Strategies by the Female Health Workers.

- They used loud speakers on polio day, Posters/ Charts, banners, samples *etc.* on VHND–*Mamta* day, *Mamta* card during home visit and counselling session at *Mamta* day.
- Most of the time, TeCHO mobile was used for data entry, maintaining work schedule and showing videos to beneficiaries.
- FHWs organized presentations on health care, menstruation and related hygiene, nutrition *etc.* under ‘School Health Programme’.

5.9.7 Perceived Benefits of Health Communication Strategies

5.9.7.1 Perceived Benefits of Health Communication Strategies expressed by the ASHA.

- More than half *i.e.* 60.4 % of the ASHAs felt that Health Communication Strategies were extremely beneficial.
- The ASHAs belonging to Chota Udepur with high level of occupational skills expressed that the Health Communication Strategies were highly beneficial, than those from Sankheda, Bodeli and with moderate and poor occupational skills.

- Very high intensity indices were observed for the majority of the items, Related to Health Communication Strategies like;
 - *Help in rapport building,*
 - *Help in providing Social recognition,*
 - *providing scope for repetition/reminders for adoption of behaviour/innovation amongst beneficiaries*
 - *assist in promoting services and innovations amongst beneficiaries.*

5.9.7.2 Perceived Benefits of Health Communication Strategies expressed by the ASHA Facilitators

- The ASHA Facilitators felt that pictures in *Mamta* card and other graphic media as well as in TeCHO mobile were very much effective for creating awareness and during counselling.
- Mobile phone was reported as an effective means to stay connected, providing information and clarifying doubts by the ASHA Facilitators.

5.9.7.3 Perceived Benefits of Health Communication Strategies expressed by the Female Health Workers.

- Female Health Workers identified, electronic media like Audio–Video Presentations on large screen for large gatherings and video clips on TeCHO mobiles to be highly effective.
- TeCHO mobiles were found very much useful in establishing contacts, data entry and retrieval, maintaining work schedule *etc.*

5.9.8 Barriers related to Health Communication Strategies

5.9.8.1 Barriers related to Health Communication Strategies reported by the ASHAs.

- Majority *i.e.* 73.6 % of the ASHAs faced moderate barriers related to selected aspects of Health Communication Strategies.

- Significant differences were observed in ASHAs according to their blocks, occupational skills, knowledge regarding Health Communication Strategies and Media use for 'Barriers related to Health Communication Strategies'.
- ASHAs belonging to Bodeli, having excellent occupational skills, with low knowledge about Health Communication Strategies and average media use expressed more barriers than their counterparts from Sankheda and Pavi Jetpur, having moderate occupational skills, with high knowledge and high media use.
- High intensity indices were found for the barriers related to 'Features of Health Communication Strategies'. The ASHAs faced barriers related to visual representation, quantity, weight (heaviness), production quality, coherence with other strategies, content and language/local terminology.
- Barriers related to 'Availability and accessibility' of HCS were faced at extreme level. The high intensity indices were found for all the items in this section *viz.*, poor condition of infrastructure resources, timely unavailability, lack of storage facilities, timely in-accessibility, insufficient infrastructure hindering effective use of Health Communication Strategies
- The ASHAs expressed moderate level of barriers with regards to 'support from authorities for use of Health Communication Strategies' *viz.*, absence of motivation, absence of monitoring and evaluation, lack of interest of seniors and indifferent attitude of seniors towards use of Health Communication Strategies while performing the prescribed duties.
- The barriers related to 'characteristics of beneficiaries' have affected use of Health Communication Strategies at extreme level to the selected ASHAs. Poor response, heterogeneity amongst beneficiaries and their indifferent attitude towards use of Health Communication Strategies were reported as extreme level of barriers by the ASHAs.
- The selected ASHAs faced extreme level of barriers at 'Personal level' due to her own characteristics like, absence of training for preparation, use and

storage of Health Communication Strategies, lack of time due to overburden of work.

ASHAs during FGDs expressed that they felt barriers related to two major aspects *i.e.* **accessibility and availability of Health Communication Strategies** and **characteristics of beneficiaries for use of Health Communication Strategies**.

5.9.8.2 Barriers related to Health Communication Strategies reported by the ASHA Facilitators.

- Thematic analysis of the responses of ASHA facilitators emerged two trends of findings *viz*, barriers related to accessibility and availability of Health Communication Strategies like and characteristics of beneficiaries for use of Health Communication Strategies.
- Majority of ASHA facilitators expressed that they faced problems related to power-cut off and poor mobile network connectivity. Since they were not provided with ASHA Diary, registers and not even TeCHO mobile, they faced difficulty in performing their roles during home visit, record keeping and sharing them with FHWs.
- They also expressed problems related to reluctant attitude of beneficiaries towards health benefits.

5.9.8.3 Barriers related to Health Communication Strategies reported by the Female Health Workers.

- FHWs mentioned problems related to data entry and its management. There is repetition of details at three places *i.e.* register, E-*Mamta* portal and TeCHO mobiles and technical problem of data entry for family migrants.
- Barriers regarding beneficiaries they expressed that, some people in the village were superstitious and had their religious beliefs which did not allow beneficiaries to seek health benefits.

5.10.1 Needs of Additional Health Communication Strategies

5.10.1.1 Overall Needs of additional Health Communication Strategies expressed by the ASHAs.

- High majority (72.4%) of the ASHAs were in need of training on 'Use of Health Communication Strategies'
- Nearly half of the ASHAs (47.2%) expressed their need for Health Communication Strategies for planning and celebration of Village Health and Nutrition Day (VHND) popularly known as *Mamta day* followed by other activities.
- Overall, two fifth of the ASHAs *i.e.*, (40.5%) expressed that they were in need of more number of Health Communication Strategies, which can facilitate their work.

5.10.1.2 Need of additional Health Communication Strategies for Home visit.

- High majority of the ASHAs *i.e.* 85.3 % and 81.0 %, expressed their need for ASHA diary and Registers respectively. Moreover, among Graphic and Print media category, it was reported that majority (65.6 % and 61.3%) of ASHAs were in need of *Mamta* card (Health card) and chart/posters respectively. Among electronic and new media, mobile and CUG sim card were needed by the majority *i.e.* 71.2 % and 61.3 % of selected ASHAs.
- Highly significant mean differences amongst categories with respect to the additional need of additional Health Communication Strategies expressed by the ASHAs from Sankheda needed more HCS than those from Pavi Jetpur
- Similarly, ASHAs with high occupational skills were in need of significantly more Health Communication strategies as compared to the ASHAs with moderate level of occupational skills for performing their duties during Home visit.

5.10.1.3 Need of additional Health Communication Strategies for Planning and celebrating VHND.

- Higher percentages of ASHAs (61.3%) needed less Health Communication Strategies.
- Among graphic and print media, majority of the ASHAs needed ASHA diary (82.5%), Register (78.2%), *Mamta* card (Health card) (77.0%) and Chart/Poster (69.0%) additionally. Among electronic media, 62.00 % and 53.70 % of the ASHAs expressed their need for mobile phones and CUG cards respectively.
- Significant differences were seen for the need of additional Health Communication Strategies for 'Planning and Celebrating VHND' by the ASHAs according to their block and occupational skills. The ASHAs from Nasvadi block needed more Health Communication Strategies than Chhotaudepur, Sankeda, Pavi Jetpur and Kavant. ASHAs with high occupational skills needed more Health Communication Strategies as compared to the ASHAs with moderate level of occupational skills for performing their duties for planning and executing VHND.

5.10.1.4 Need of additional Health Communication Strategies for Visit to Health Facilities.

- Overall, majority of the ASHAs (65.6%) needed less number of Health Communication Strategies for planning, coordinating and making any visit to health facilities.
- Higher % of the ASHAs needed Register (72.4%), ASHA Diary (71.5%), *Mamta* Card (59.2%), Mobile phone (58.9%) and chart/poster (54.3%).
- Significant differences were observed in ASHAs for need of additional Health Communication Strategies for 'Visit to Health facilities' with respect to their blocks, educational qualification, occupational skills and knowledge regarding Health Communication Strategies.

- The ASHAs from Nasvadi had significantly high demand than their counterparts from all the blocks *i.e.* Chhotaudepur, Bodeli, Pavi Jetpur, Kavant and Sankheda.
- ASHAs who studied up to secondary school, having excellent occupational skills and having low knowledge about Health Communication Strategies had expressed more need than those who studied up to higher education, with moderate occupational skills and high knowledge of Health Communication Strategies.

5.10.1.5 Need of additional Health Communication Strategies for Village Health Sanitation Committee Meeting.

- Fifty-eight percentages of the ASHAs needed less number of Health Communication Strategies for VHSC meeting.
- Highest need reported by the ASHAs, was registers (73.0%), followed by ASHA diary (66.3%), Mobile (59.8%), Chart/poster (58.6%) and Banner (55.8%).
- Significant differences were observed in ASHAs according to their blocks, occupational skills and knowledge regarding Health Communication Strategies for need of additional Health Communication Strategies for 'VHSC meeting'.
- The ASHAs belonging to Nasvadi, having excellent occupational skills and with low level of knowledge regarding Health Communication Strategies had more need of Health Communication Strategies than those belonging to Chhotaudepur, Sankheda, Pavi Jetpur, Kavant and Bodeli, having moderate occupational skills with medium and high knowledge.

5.10.1.6 Need of additional Health Communication Strategies during Keeping and informing about records.

- Little more than half (58%) of the ASHAs needed less number of Health Communication Strategies for keeping and informing about records.
- Similar high majority *i.e.* 81 % of the ASHAs needed registers and ASHA diary followed by 66.6 per cent mobile phones additionally.

- The ASHAs from Sankheda needed highly significant number of Health Communication Strategies than those from Chhotaudepur, Kavant and Nasvadi for their work related to maintaining and giving information about health records of their area.

FGD data majorly asserted upon improvement in current Health Communication Strategies, need of additional media and training related requirements expressed by the ASHAs for performing their assigned roles.

5.10.1.7 Needs of additional Health Communication Strategies expressed by the ASHA Facilitators.

- ASHA Facilitators were found to have least provision; therefore, they were in extreme need of ASHA kit, mobile phone and also training for folk media.
- Some of the Facilitators suggested to provide more of graphic media like posters and flipbooks to ASHAs.

5.10.1.8 Needs of additional Health Communication Strategies expressed by the Female Health Workers.

- Most of the FHWs recommended the review of TeCHO software and system of record maintenance since they need to do lot of duplication.
- Most of FHWs strongly suggested that TeCHO mobiles should be provided to ASHAs and ASHA facilitators for smooth functioning of data management, better connectivity and effective use on field for showing video and other posters in it.
- Majority mentioned that they need projective facilities like LCD with screen need to be established at PHC and Anganwadi level for arranging video show for beneficiaries on *Mamta* day and addressing group off villagers.

5.10 Conclusion and Recommendations

The present study was aimed at studying various aspects of Health Communication Strategies under National Health Mission in Chhotaudepur, Tribal district of Gujarat. Results of both survey, content analysis of Focus Group Discussions and In-Depth Interview lead to the following concluding observations.

- Chhotaudepur district received various Health Communication Strategies from the State IEC department which then further distributed, displayed and used by staff and grass-root level functionaries (ASHA, ASHA Facilitators, Female Health Worker, Aanganwadi Worker). There existed notable Health Communication facilities to carry out health promotion activities, however, it can be said that they were not used at optimum. There was no proper documentation, monitoring of Health Communication Strategies. Health Communication component was observed as neglected and ignored area under NHM in Chhotaudepur.
- A very high majority of the ASHAs had received complete training, a larger group of the ASHA survey under present investigation belonged to young age, studied up to secondary level, possessed more work experience as an ASHA under NHM and had medium knowledge about Health Communication Strategies. Whereas comparatively smaller group had high media use and possessed excellent occupational skills. Almost all the ASHAs appreciated their uniform since it gave them recognition in community and at health facilities. Various trainings had developed self-esteem among the ASHAs and therefore they felt empowered, motivated and self-sufficient. Most of them expressed major positive changes at personal, family, community and among health staff. Their tireless, selfless, constant and dedicated efforts in health care service delivery for community people have earned them respect, trust and credibility in communities, Government offices and NGOs, therefore now they rely upon ASHAs for smooth rollout of their activities and programmes.
- A comparatively large group of ASHAs had a higher number of sources of information on Health and related programmes but were provided with a less

number of Health Communication Strategies. In reality, they used a still lesser number of Health Communication Strategies and comparatively less need reflecting for additional Health Communication Strategies.

- The highest use of Health Communication Strategies was found for 'Village Health and Sanitation Day', among all other four activities. Graphic and Print media i.e ASHA kit was used for maximum times by the ASHAs and ASHA Facilitators and besides, Female Health Workers used TeCHO mobile too.
- ASHAs perceived that Health Communication Strategies were highly beneficial in rapport building and getting recognition among the community people. All three sets of respondents perceived that they can explain, promote and motivate beneficiaries for health care programmes and healthy behaviours by use of Health Communication Strategies. This means that all the grass-root level health care functionaries had high perception towards Health Communication Strategies and they realised the potential of communication for social change and promotion of health programmes.
- Concerning barriers related to Health Communication Strategies, data revealed that overall, they moderately affected the Health Communication activities of the ASHAs, however, certain aspects like features, availability and accessibility, characteristics of beneficiaries had poised extreme level of barriers for the ASHAs while using Health Communication Strategies. Grass root level health functionaries reported almost similar barriers related to Health Communication Strategies under NHM in their tribal areas of Chhotaudepur district.
- Grass-root level health functionaries reflected on their need of additional Health Communication Strategies, very high demand was reflected for Health Communication Strategies to facilitate planning and celebration of Village Health and Nutrition Day (VHND)– *Mamta day*. Their demand was more for *Mamta* Kit (ASHA Kit) and publicity media in and around communities.
- It can be derived from findings that ASHAs having varying Occupational skills, Training received under NHM, knowledge about Health Communication

Strategies and blocks had significant differences in the majority of the selected aspects under study.

- Since NHM is a mission mode umbrella programme aiming 'Universal Coverage of Health'; communication component should be devised and encashed at utmost. A well instigated Behavior Change Communication plan has the potential to expressively improve these practices and consequently accelerate health outcomes. The challenge with Health Communication efforts has mostly remained that it has been implemented in silos and segmented approaches such as population control and family planning, adolescent health, child health, maternal health, HIV *etc.* As a result, communication intervention within the national programme has failed to reach a critical mass in Tribal areas.
- There existed a lack of continuity and coherence in designing and use of Health Communication Strategies. As NHM caters to all health programmes and diseases, there require serious efforts towards coherence, continuity and convergence in Health Communication Strategies.
- Communication is an integral component of NHM, it can connect, create awareness, mobilise people and assist in managing information and data. Health promotion and health education through strategic communication can play a significant role in desired behaviour change and promoting health benefits.
- CDHO during his interview also reflected his concern for the quality of health messages. He reported that most of the time quality of communication is neglected because of more focus on target-based quantity (data) driven health programmes.

Therefore, policy planners should pay equal attention to planning, designing, implementation and monitoring of strategic health communication efforts as to promote the prevention of diseases rather than only on curative and service delivery aspects of health programme.

- Indian societies have deep-rooted culture and tradition touching all the aspects of human life. Culture-specific and culture-centric strategic communication can play a pivotal role in mass mobilization and adaptation of better and healthy living practices. ASHAs, ASHA Facilitators, FHWs mentioned that tribal people of Chhotaudepur adapt fast when they are exposed to real-life examples and comparative situations in their habitat. This denotes characteristics of social learning theory and Socio-Ecological model.
- As per Social Cognitive Theory (Miller and Dollard, 1941) environment and people's behaviour constantly influence each other watching the action of another person is observational learning. Bandura and Walter (1963) developed the Social Learning Theory with the principle of observational learning and vicarious reinforcement.

It further explains the process of behaviour approval to advocacy and finally policy framework. Therefore, it is suggested to consider such theories while planning, designing and implementation of Health Communication Strategies. People learn and adapt fast what they see in others, in their surrounding and they also need social approval as described in Socio-Ecological model.

- Although health problems of an almost more or less similar kind exist amongst people living in different areas. However, people will recognize and adapt easily when they can relate the communication message with themselves and their culture. An integrated, evidence-based strategy, covering the life stages and continuum of care approach is vital to addressing the socio-cultural bottlenecks, further to support in acceptance, mobilise towards the adoption of preventive practices and availing appropriate care.

Therefore, the study strongly endorses to NHM-state level and district level officials along with media agencies involved in planning and designing of Health Communication that every Health Communication plan need to be local people specific/centric and their culture-sensitive. This can be achieved with local representation through local terminology in the message, graphic/pictures of their society and culture in all the communication strategies be it graphic/print, electronic,

folk forms used during interpersonal, group and mass media activities. Such Communication would also cater to issues that underlie the low use of health care services, such as free entitlement to health services, restrictions on women and availability of health care services in the vicinity thus might aid in reducing health issues amongst communities.

The demand for folk media was reported by all selected participants of the study (*i.e.* ASHAs, ASHA facilitators, Female Health Workers and CDHO) for promotion of healthy behaviours and health services among beneficiaries of tribal district Chhotaudepur. As it can directly connect, question in satire way and emotionally influence the adoption of better health practices.

- The FHWs recommended the need of a smartphone for ASHAs and ASHA facilitators. The reason may be that they have observed the interest of beneficiaries in new media and technologies and ultimately achieving effective results for behaviour change.

Therefore, it is strongly recommended to the NHM–state level and district level officials and other agencies involved in planning and designing of Health Communication to carry out a systematic evaluation of TeCHO Mobile, its use, benefits and barriers so that this new technology can be harnessed for its utmost potential in achieving health targets and thus ultimately the healthy nation.

- According to ASHAs guidelines, the high majority of the selected ASHAs have been trained under NHM. However, training concentrates around curative aspects of diseases, MCH, vaccination *etc.* whereas preventive aspects of Health programmes *i.e.* Health Communication is hardly included in training sessions. Rather than should an equally important aspect that should be covered under training sessions.

It implies that policy planners along with Health communication experts should outline and implement training on use, types, the importance of Health Communication Strategies in National Health Mission for all staff and front–line functionaries who directly deal with beneficiaries. Such training programme should

have compulsorily session on folk media as well. This will assist to achieve goals of health promotion and service delivery. State and district level officers should pay urgent attention towards capacity building of all the staff and volunteers on effective communication interventions for better dealing with beneficiaries.

- Further, findings highlighted that ASHAs, ASHA facilitators and Female Health Workers used a variety of Health Communication Strategies during Village Health and Nutrition Day, which is a monthly regular event in a village. This opportunity of interacting with the majority of beneficiaries (ANC, PNC, Children, Adolescent, Fertile Couples *etc.*) should be utilized optimally by using multiple approaches of Health Communication. *Mamta* Day event should be publicized and carryout more strategically by the health department and Health Communication planners. They should provide more facilities like TV, Projector, Loud Speaker, some stage/Platform, Display boards *etc.* and should produce need-based media for counselling, group meeting, mass mobilization, take-home materials/literature *etc.* keeping in mind the local beneficiaries. Hence, should plan to implement a blend of mass-media, mid-media and Inter-Personal Communication (IPC) to influence individual practices and social customs to promote positive change.
- Moreover, in planning and designing of communication strategies, grass-root level functionaries and volunteers (ASHAs, ASHA facilitators and Female Health Workers Block and District level officers) should be involved since their on-field experiences with their beneficiaries are very imperative in a successful evidence-based roll-out of Health Communication efforts. They should ensure participation of stakeholders at different levels starting from the community, service providers and front-line functionaries across the continuum of health care cycle. Therefore, their responses essentially considered while planning of Health Communication Strategies. This is also practical since Front line Health Functionaries are ultimate users of Health Communication Strategies for creating awareness, providing Health Education, mobilisation, promotion of Health benefits/services and

establishment of a link between all stakeholders associated with National Health Mission to maximize reach and impact. Custom-made print communication and telephone-delivered interventions are among the most important of these innovative uses. If authorities plan to achieve positive results in communication for diverse populations, the field of public health communication should itself be strengthened. This demands both investments in research and training to achieve active participation and collaboration of experts from many allied disciplines.

- They should be provided assistance, support and motivation to organise and conduct Health promotion programmes through strategic communication. State-level policy planners and district administrators should be sensitised towards the importance of Health Communication strategies and its urgent need to keep a check on material resources, its stock and monitor supply chain management of on-field use and its impact evaluation for documenting success stories.

In a nutshell, the researcher would like to place on record the implications of research under following two sections:

Firstly, **National Health Mission officials and concerned departments of Gujarat** should;

- maintain continuity, coherence, convergence and consistency in planning, designing and execution.
- design and execute Training/capacity-building on Health Communication Strategies across all staff and volunteers under NHM
- provide and build up Proper/required infrastructure facilities for Health Communication activities
- carry out a systematic situational analysis of Health Communication Strategies to make them need-based and local/target specific
- consider the theoretical framework to design and produce a variety of media for various approaches

- plan constant supervision, provide assistance and motivation for use of Health Communication Strategies
- strengthen communication divisions/bureau in states and establish their linkages with the technical bureau.
- exploit existing communication initiatives and interventions for improvement and maximize the utilization of available resources for implementation and scale-up.

It can also be recommended that health communication be included in all levels of health's curriculum to enable health educators to acquire a better skill to promote health and improve well-being.

Secondly, **academicians and researchers;**

- can carry out a study with similar objectives in a comparative manner for urban and tribal or urban and rural areas.
- An in-depth content analysis study of Health Communication Strategies can be undertaken
- In-depth need assessment cross-sectional study should be undertaken for Health Communication Strategies may be overall or programme specific
- Training needs related to Health Communication Strategies, Health Communication or Health Education should be studied at all levels of health care provider up to health care planners and accordingly capacity building programme should be arranged for them respectively.
- Curriculum designing on Health Education and Health Communication should be in a scientific manner and should be included at all levels of health communication planners, media students, health care providers across all levels and community-level health volunteers. Health Communication and Health Education should stand as a discipline of its own.
- Impact assessment and evaluative study can be planned for ongoing Health Communication Strategies and or health campaign.
