CHAPTER - 4

RESULTS & DISCUSSION

In the present research mix-method approach was used to achieve its broad objective to study Health Communication Strategies in Chhotaudepur district of Gujarat state. Hence for easy comprehension, the Findings and Discussion chapter is divided in following sections:

4.1 Profile of Health Facilities in Chhotaudepur District

- 4.1.1 Healthcare Facilities
- 4.1.2 Human resource deputed in Chhotaudepur District
- 4.1.3 Capacity Building of Human resource for Health Communication
- 4.1.4 Availability of facilities at PHC for Health Communication activities

4.2 Process of Health Communication Strategies under NHM in Chhotaudepur District

- 4.2.1 Process of receiving of Health Communication Strategies
- 4.2.2 Distribution system of Health Communication Strategies
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- 4.2.5 Benefits of Graphic/print, electronic/new media and folk media in context to Chhotaudepur District
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4.7.4.1 Responses of the Female Health Workers to Barriers related to Characteristics of Health Communication Strategies

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4.8 Need of Additional Health Communication Strategies

4.8.1 Need of additional Health Communication Strategies expressed by the ASHAs

4.8.1.1 Need of additional Health Communication Strategies for Home visit

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4.8.1.3 Need of additional Health Communication Strategies for Visit to Health Facilities

4.8.1.4 Need of additional Health Communication Strategies for Village Health Sanitation and Nutrition Committee Meeting

4.8.1.5 Need of additional Health Communication Strategies for Keeping and informing about records

4.8.2 Responses of the ASHAs during FGDs to Need of Additional Health Communication Strategies

4.1 Profile of Health Facilities in Chhotaudepur District

This section of results and discussion chapter caters to the first objective of the present research. The researcher made personal visits to District Programme Coordinator, District Panchayat Office, Chhotaudepur district to seek data fulfilling the first objective *i.e.* 'to prepare **Profile of existing Health Facilities** in Chhotaudepur district of Gujarat state'. A proforma was shared with the CDHO and then data were provided by District Programme Management Unit, District Panchayat Office, Chhotaudepur, in August 2019.

4.1.1 Healthcare Facilities

Table 22

*Healthcare Facilities in Chhotaudepur District**

Indicators	Data
Total number of PHCs	50
Number of 24*7 Primary Health Center	22
Total number of CHCs	12
Total Number of Sub Centers	310
Number of District Hospital	1
Number of Ayurvedic Dispensary	0
Number of Operational Anganwadi	1182
Number of Anganwadi having its Building	1182
Adolescent health clinic/s	01
Number of NBCC (All delivery points facilities)	57
NRCs/CMTCs	01 NRC/ 7 CMTC

Data compiled by the researcher
(Source: District Programme Officer, District Panchayat Office, Chhotaudepur as on August 2019*)

According to District Panchayat office, Chhotaudeprur District (2019), the above table 22 shows that 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.

4.1.2 Human Resource Deputed in Chhotaudepur District

Table 23

*Human Resource Deputed in Chhotaudepur District **

Staff Designation	Sankheda	Pavi Jetpur	Kavant	Chhotaudepur	Bodeli	Nasvadi	Total
CDHO				One officer			
IEC officer				One officer			
BHO	1	1	1	1	1	1	6
MO (Allopathy)	2	7	4	0	6	5	24
MO (AYUSH)	1	2	2	2	1	1	9
Staff Nurse	4	15	16	12	15	13	75
Laboratory Technician	4	9	9	11	8	7	48
Pharmacist	4	10	6	11	8	6	45
Office staff	2	2	2	2	2	2	12
Health Supervisor (Male)	1	3	1	0	1	1	7
Health Supervisor (Female)	3	8	4	1	3	3	22
Male Health Worker (Including SC)	21	57	66	71	44	47	306
Female Health Worker (including SC)	21	55	65	72	44	49	306
ASHA Facilitator	11	21	21	24	22	19	118
ASHA (including SC)	111	188	203	236	193	186	1117
AWW	112	153	214	236	190	184	1089

Data compiled by the researcher

(Source: District Programme Officer, District Panchayat Office, Chhotaudepur as on August 2019*)

Referring to Ministry of Health and Family Welfare (2017), 'At the district level, the mission operates under the District Health Mission (DHM)/City Health Mission (CHM) with District Health Society (DHS) headed by District Collector. Societies for various National and State Health Programmes are merged in DHS.'

'DHS has a Governing Body with District Collector/District Magistrate as the Chairperson and Chief Medical Officer (CMO) as the Chief Executive Officer (CMO) as the Chief Executive Officer (CEO). It also has an Executive Committee with Deputy District Collector (DDC)/ CMO (if no DDC) as the Chairperson and District Programme Manager (DPM) as the CEO and Convener. DHS is responsible for planning and managing all NHM programmes in the district. (Ministry of Health and Family welfare (p.18).

Table 23 reveals on Human resources deputed in Chhotaudepur district with specific reference to the Health Communication-community process. The district health department was headed by the CDHO and appointed for full time. Whereas, the post of IEC Officer was vacant and therefore an officer was appointed as In-charge IEC officer, who had to look after health promotion for the selected tribal district.

Each block had one BHO means there were six BHOs. Total twenty-four MO (allopathy) and nine MO (AYUSH) were appointed. These officers shouldered the responsibilities of health centres in the district.

There were 75 nurses, 48 Laboratory Technician, 45 Pharmacist and in total 12 office staff in Chhotaudepur district. Total sevens male Health Supervisors and 22 Female Health supervisors were on roll during data collection, wherein there was no Male Health Supervisor appointed in Chhotaudepur block. At subcentres in the district, there were 306 Male Health Workers and same 306 Female Health Workers available.

As per Ministry of Health and Family Welfare, GoI (2005), there would be one ASHA facilitator for every ten ASHAs. In the whole tribal district, there were 118 ASHA Facilitators and 1117 ASHAs, also 1089 Aanganwadi Workers (AWWs) were appointed.

4.1.3 Capacity Building of Human resource for Health Communication

Regarding the capacity building of staff and Health workers for Health Communication, it was reported by CDHO during the in-depth interview that, there had not been any formal training organised in Chhotaudepur. However, the communication component was dealt informally during group meeting and personal interaction with all staff specifically front-line health functionaries (FHW, ASHAs and AWWs).

District Programme Coordinator (DPC) highlighted that weekly review meeting of all takes place on every Saturday at PHC, wherein MO of the PHC addresses the meeting, sometimes demonstrates the important practice to front line health workers. Here, DPC referred to the Satellite Communication (SATCOM) programme and information/demonstration given by the respective MO as training of Health Communication. (Personal visit of researcher, 20th April 2019, District Panchayat Office, Chhotaudepur)

SATCOM programmes are been telecasted on 'Vande Gujarat' channel-2 and 5 regularly as per its schedule, which was watched by all staff members and volunteers (ASHAs) at PHC. Mostly all PHCs (except 2 PHCs of Kavant) were equipped with a Television set with DTH system (Table 24). Government of Gujarat has established the Bhaskaracharya Institute for Space Applications and Geo-Informatics (BISAG), which telecast SATCOM programme for the promotion and facilitation of the use of broadcasting and teleconferencing networks for distant interactive training, education and extension. SATCOM programmes on health aim to provide information, knowledge and training on preventive and curative aspects of diseases, service provision, health promotion through government health programmes and schemes *etc.* (Department of Science and Technology, Government of Gujarat, 2020)

In Chhotaudepur district there existed total vacancy (8 posts) of TeCHO Mobile Coordinators. Until their appointment, one MO from each of six blocks were entrusted with the responsibility of TeCHO Mobile Coordinator additionally. Therefore, they coordinated newly launched smartphone-based technology with

FHWs in their respective block. They trained and supported the FHWs in data entry and management as well as facilitated smooth functioning of Health Management Information System (HMIS) up to district and state level. This way training of Health Communication for TeCHO mobile was taken care as per the additional routine work by the TeCHO mobile Coordinators in Chhotaudepur.

District Panchayat Office, Chhotaudepur (March 2019) pointed out the staff crunch, as majority posts of senior officers (Class II) remained vacant, most importantly out of 85 sanctioned posts of MOs only 30 appointments were made. Beside this, on Health Communication part, in spite of having provision of 17 posts of Counsellors under NHM, not a single post was filled in. (Joint Review Mission team visit, PPT slide. 7-8).

Moreover, concerning training on Health Communication, the selected ASHAs of the study reported that they were not given any specific training per se, except that the training of module-5 which included, 'Occupational skills' for them. (ASHA profile table 25 and need table 76)

Overall, it was observed that no attempts had been made at the district level to organise any properly planned capacity building programmes or workshops on Health Communication for health workers especially with the holistic approach. Fragmented efforts were attempted by the government as reported by the ASHAs and other Health workers in this direction.

These lead to the inference that there may not be any proper understanding of Health Communication and Health Communication Strategies. Mere discussion or guidance on how to talk, convince, motivate and mobilise beneficiaries for availing health facilities cannot foster the concept of Health Communication and Health Communication Strategies.

4.1.4 Availability of Facilities at PHC for Health Communication Activities

Table 24

*Availability of Facilities at PHC for Health Communication Activities**

Facilities	Sankheda	Pavi Jetpur	Kavant	Chhotaudepur	Bodeli	Nasvadi	Total
No. of PHCs	4	10	10	11	8	7	50
Electronic and New Media							
Electricity	4	10	8	11	8	7	48
PA system	4	1	8	1	0	0	14
Television (cable)	5	0	7	0	6	0	18
Radio	0	0	0	0	0	0	0
Computer	12	12	10	11	16	7	68
Laptop	3	12	9	7	5	0	36
Internet Connectivity	5	0	9	0	5	6	25
Landline phone	5	0	1	0	3	0	9
Mobile phone	5	0	0	0	0	0	5
TeCHO mobile	21	57	0	72	44	53	247
CUG sim cards	21	57	0	72	44	49	243
SATCOM sessions	5	4	9	4	6	6	34
Graphic and Print Media							
Building Signboard	5	10	8	10	0	6	39
Directional signage to PHC	0	0	8	0	5	6	19
Wall painting	4	10	8	9	8	4	43
Chart/Poster	4	10	8	9	8	4	43
Leaflets	0	0	8	0	0	0	8
Booklets	4	10	67	9	0	4	94
Flipbooks	4	10	10	9	0	4	37
Flashcards	0	0	0	0	0	0	0
Newspaper	No	No	No	No	Y	No	Yes
Magazines and Periodicals	No	No	No	Yes	Y	No	Yes
Diary	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Registers	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Health cards	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Banner	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Hanging Mobiles	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Others							
Samples (eg. Condom, IUD *etc.*)	No	No	No	No	No	No	No
Folk media	No	No	No	No	No	No	No

Data compiled by the researcher

(Source: District Programme Officer, District Panchayat Office, Chhotaudepur as on August 2019*)

Table 24 reflects that there were total of 50 PHCs in Chhotaudepur district catering to healthcare needs of all six blocks. Further 48 PHCs were electrified except two PHCs of Kavant block, which did not have electricity supply.

In Kavant block, eight PHCs, in Sankheda all four PHCs and one PHC each in Pavi Jetpur and Chhotaudepur blocks had Public Address system (PA) for making announcements in communities, whereas Bodeli and Nasvadi blocks did not have any PA system. There was no radio available in any of PHCs of Chhotaudepur district.

There were seven Televisions in Kavant, six in Bodeli and five in Sankheda, whereas there was not a single television existed in any of 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.

Further, it is revealed from the table 24 that, nine landline phones and five mobile phones were in use. Total 247 TeCHO mobiles and 243 CUG cards were made available in all five blocks except Kavant. This is a surprise to note as a finding since in 2018 TeCHO mobiles were launched under NHM by the department of Health and Family Welfare, GoG. There might be unavailability of data but there was no specific reason given by DPO in this regard. During the personal visit and FGDs with FHWs, the researcher noticed the availability of TeCHO mobiles with them in Kavant Block. In fact, on the same day, FHWs attended their regular training on the use of TeCHO mobiles by block TeCHO coordinator. (Personal visit by researcher, Kavant BHO, 13th March 2019)

The district had created facilities covering all blocks for watching SATCOM programme, therefore 34 such sessions were possible in a month usually on Monday, Wednesday or Saturday.

Apart from electronic and new media, graphic and print media were available to facilitate Health Communication and Health Promotion activities.

Chhotaudepur, tribal district is scattered in its settlement. In such condition to locate and reach to the health facility becomes a difficult task for the patient, family and other visitors. In such a far-flung area, only thirty-nine PHCs had building signboard and only nineteen had directional signage to reach the health facility.

Forty-three wall paints and Chart/posters were put up at various places in the whole of the district for visibility and publicity of health-related messages. Only in Kavant block, eight types of leaflets were provided. Total 94 booklets, highest 67 booklets among them were available in Kavant block and on contrary Bodeli block did not have a single booklet for health education. Similarly, out of thirty-seven flipbooks, Pavi Jetpur and Kavant blocks had ten booklets each, followed by nine with Chhotaudepur and four each in Sankheda and Nasvadi blocks and Bodeli did not have any flipbook. On the other side, only Bodeli block had access to newspaper and Bodeli and Chhotaudepur blocks had subscription of magazines and periodicals.

It can be drawn from the table 24 that 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. Despite this on the contrary ASHAs, FHWs and ASHA Facilitators had expressed a need for sufficient and timely supply of these materials under sections namely barrier and need of additional Health Communication Strategies of the present study.

Concerning samples like (IUD, Condoms *etc.*) and folk media, the table 24 reflects a total absence of such resources, whereas in the provision and use section, samples under study reflected that they used such samples to explain their benefits as contraception also they mentioned about occasional folk performances. Additionally, during in-depth interview, CDHO also shared about hired services taken from folk troops to create awareness among communities. Hence, 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.

On visit of Joint Review Mission team during March 2019, District Panchayat Office, Chhotaudepur included in their presentation about awareness activities carried out on Seasonal flu (H1N1) for the year 2018-2019. It reflected that in the rural part of tribal district Chhotaudepur, 35 thousand pamphlets and 15 hundred pocket cards were distributed. It was also shared that 113 posters were displayed/pasted. They conducted two group meetings and one awareness programme by private practitioner. However, it can also be observed that there was an absence of *laghu shibir, lok sampark*, push messages and FM radio during 2018. (Slide 68).

Overall, the data reflected inattention towards Health Communication activities and Health Communication Strategies and their documentation. Almost similar negligence and scarcity of resources as well as poor documentation of such health promotional activities were recorded by Thakur et al. (2017) for selected districts of Punjab and Haryana. Long back, Hiramani (1991) also claimed that there was no systematic approach being followed for distributing the Health education materials to PHCs. (As cited in Nongmaitthem, 2014, p.57).

4.2 Process of Health Communication Strategies under NHM

An in-depth interview was arranged with Chief District Health Officer (CDHO), Dr.Chaudhari, on 20th April 2019 at his office in District Panchayat, Chhotaudepur. The Officer was interviewed for the process of planning, designing, distribution and monitoring of Health Communication Strategies, the involvement of district and Grassroot level health functionaries in planning, barriers and benefits of Health Communication Strategies, *etc.* to gather the responses for the second objective. The responses were transcribed first and then sub-points were prepared using content analysis. Following sub-points highlight upon responses given by the CDHO during the in-depth interview.

4.2.1 Process of receiving Health Communication Strategies

According to Department of Health and Family Welfare, at State level, IEC team is constituted. The team is responsible for the drafting of key messages. Further, CDHO reported that designing and production of Health Communication Strategies was taken care of by them for different health programmes under NHM. Sometimes State IEC department produces hardcopies and sometimes they only prepare the soft copy of graphic and print materials.

District IEC department comes under District Development Officer. Health Communication strategies were received in two ways, sometimes 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.

The office of DDO had a fixed rate and policy for printing and production for the specific materials like flex banners, posters *etc.* The district team referred to ready reckoner, depending upon programme requirements, the DDO constituted to foresee the budget before approving the printing/production. So, following this formality, the production of certain materials is done decentralised way at the district level.

Moreover, in times of urgency, only soft copies were received at the district level and then production was managed locally as per the prescribed guidelines and policy of DDO office.

The DPO explained that supply was based on the demand represented from the bottom level (*i.e.* PHC-CHC to district level. It means that demand is first checked at PHC level and then further cumulative demand was prepared for all six blocks and the whole of the District. At PHC level different modes of the requirement for IEC/BCC was broadly prepared considering the program, population, community, and sum of total requirement at taluka level, which is sent to the upper level (district level).

4.2.2 The distribution system of Health Communication Strategies in the District

CDHO when questioned about the distribution, it was explained that distribution and supply chain management was managed from the District Panchayat Office under guidance of District IEC officer. Any material received at the district was then distributed to each block and Community Health Centre. Further, it was sent to the PHCs. From the PHC the whole material was further divided for the display at PHC and important spots in the village; and given to front line health functionaries (*i.e.* ASHAs, AWW, ASHA Facilitators, FHWs and other concerned staff/volunteers) to facilitate their Inter-Personal Communication (IPC) and group activities with the beneficiaries. Stock registers were maintained at different levels but not uniformly.

4.2.3 Monitoring of Health Communication Strategies

As per CDHO, Monitoring of Health Communication Strategies was certainly done in the selected tribal district but in an occasional manner. There were no systematic and documented proofs shared by the CDHO regarding monitoring of Health Communication Strategies. However, the responses about monitoring were classified and presented under graphic and print media, electronic, folk and other media categories.

4.2.3.1 Monitoring of Graphic and Printed Media. Monitoring of graphic and print media was explained by the CDHO with regards to their display and use. By quoting an example of Polio Campaign, he said,

> *'On Polio day, whether the poster and banner are displayed or not-is very essential to check. Also, whether they are displayed at an appropriate and visible place for each booth or not.'*

Further, it was added that banners and posters were valued (worth) when placed at a proper place otherwise it remains futile exercise. Since posters and banners were characterised by attractive visual and a small caption, therefore people can easily understand through visuals (those who cannot read). Besides this, frontline

health functionaries also explained and conveyed messages for desired behaviour change.

CDHO also mentioned about occasional direct monitoring of ASHAs and other frontline health functionaries done on the field for their use of Health Communication Strategies by the respective MOs/Supervisors.

4.2.3.2 Monitoring of Electronic Media. It was reported that the District office gave away scrolling messages on local cable television to reach out to the television audiences. Besides this SATCOM television programme was regularly watched by all specifically ASHAs, FHWs, ASHA facilitators and other staff at PHCs once a week. The TV programme aims to provide knowledge and training to grass-root level functionaries. So, these electronic media were used for fulfilling training purpose. A topic like, IPC, vaccination *etc.* were taken up by the panel of experts during the live phone-in television programme across the state.

In recent past (2018) TeCHO application based smart mobiles phones were launched by NHM and Health and Family Welfare Department, GoG having many features in it. These smartphones were given to Female Health Workers on a trial base. The phone had pre-installed small video clips such as care to be taken during pregnancy, new-born care at home *etc.*

District and Block level coordinators were assigned for monitoring of TeCHO mobile and its use.

Monitoring was done by Medical Officer till grass-root but according to CDHO, FHWs were not good orators as they might not be able to explain the concept properly. CDHO suggested that the new generation FHWs should plan innovative approaches as they spend most of the time in calling beneficiaries on *Mamta* day.

4.2.3.3 Monitoring of Folk and other Media. Regarding the monitoring of folk media and other media, the CDHO elaborated by saying,

'Under Saptadhara the health department staff can identify their potential and can use it for their work. Using art and creativity has good scope to attract the audience, therefore health workers and volunteers should accommodate Dramatization, songs and other art forms in their work.'

Knowledge Consortium of Gujarat, Department of Education, GoG (2018), Saptadhara is an initiative by the Government of Gujarat to have a focus on various areas of education, art and knowledge for the manifold progress of the youth. These areas of focus are known as Band/ cluster/spectrum/continuum/symphony of activities (Dharas):

- *Gyan Dhara* (Knowledge Band)
- *Sarjanatmak Abhivyakti Dhara* (Creative Expression Band)
- *Rang, Kala and Kaushlya Dhara* (Fine Arts Band)
- *Naatya Dhara* (Theatre Band)
- *Geet Sangeet and Nrutya Dhara* (Music and Dance Band)
- *Yog Vyayam and Khelkud Dhara* (Yoga and Sports Band)
- *Samudayik Seva Dhara* (Community/ Social Service Band)

The CDHO expressed that,

'Saptadhara programme helped in identifying and encouraging local skills and creativity at activities like singing, acting, drama etc. When our staff (having creative skills) is on the field, they can plan and coordinate their awareness programme effectively. In the tribal area, local language and local art are more appreciated by local people. There exists a communication gap with outsiders, therefore could not attract much to local people for behaviour change and adaptation of health services. Use of local art and creativity has also association with human psychology, they feel more connected and association with their life.'

Thus, it can be drawn that folk media and other creative media were valued and therefore promoted under *Sapthadhara* programme, however again it was evident that their monitoring was not set in place and also not outlined properly in any document.

4.2.4 Involvement of District and grass-root workers (ASHAs, FHWs and ASHA Facilitators) in the planning of Health Communication Strategies

During the In-Depth Interview, the CDHO was asked about his views on involvement of district and grass-root level health workers (ASHAs, FHWs and ASHA Facilitators) in the planning of Health Communication Strategies. He expressed that all the employees and staff should be involved during planning. Further, it was reported,

> *'Observations of district-level staff and field-level staff are asked regarding media. Directly they are not involved in the process, but their involvement is essential.'*

This means that however, the CDHO realised the importance of the involvement of district and grass-root level workers in the planning of Health Communication Strategies, their involvement remained nil. Their involvement would contribute to designing of tailor-made Health Communication Strategies for effectiveness and attainment of objectives of Health Communication *i.e.* health programme promotion and healthcare awareness.

Grass-root level workers sampled under present study also reflected their willingness to participate in the planning of Health Communication Strategies to extent that they expressed the need of training to build their capacity for planning, designing and effective use of Health Communication Strategies. (Table 76)

4.2.5 Benefits of graphic/print, electronic/new media and folk media in context to Chhotaudepur

The CDHO reflected his experiences and perceptions regarding benefits of graphic/print, electronic/new media and folk media in Chhotaudepur which are

described under following three categories *i.e.* for creating awareness, for counselling and digital technology for work coordination.

4.2.5.1 For creating awareness. In words of CDHO,

'large size posers with appealing pictures, videos on projector and TeCHO mobile are effective. Cinema and movies are still new for the local people, audio-visual media catch, hold and disseminate message effectively. Therefore, audio-visual media are best suitable for the tribal population.'

This explains well the significant benefits of various Health Communication Strategies for creating awareness under NHM. One of the purposes of Health Communication Strategies is to create awareness about ongoing government health programmes, available health facilities and for required behaviour change.

The CDHO of Chhotaudepur district might have observed benefits of large size pictures in posters and audio-visual media. Therefore, reported that they are best suitable for tribal people. This further suggests that NHM should provide more posters with large size picture and audio-visual materials for an improved awareness programme on social determinants of health.

4.2.5.2 For counselling. Regarding benefits of Health Communication Strategies for counselling, the CDHO stressed more weightage on IPC Skills of an individual counsellor, however, he also felt that Health Communication Strategies could play a supportive role during counselling.

'For Counselling, Inter-Personal Communication is essential. This requires the Health Worker to be competent and have sufficient subject knowledge. Counselling helps in clarifying doubts of an individual/patient. It is a difficult task and responsibility of a counsellor. An effective counsellor is above (more important than) IEC materials. For counselling, an individual is required to be designated. He/she can answer with a specific take-home message. Then the other person has to decide whether to accept or reject. Counsellors can important messages related to the determinants of health. He has to have

correct and sufficient knowledge to attend to the queries of the client during counselling.'

It can be inferred that in Chhotaudepur tribal district, IPC of a health care provider and worker (be facility-based or field-based) is at the core of counselling of an individual or a family for their health concerns. Such counselling lead to better results if the counsellor is equipped with good IPC Skills, sufficient knowledge and also Health Communication Strategies.

Therefore, it is expected from the health department to conduct frequent and need-based skill development training to improve IPC activities for health care providers who are involved in counselling at health facilities as well as on filed during group gathering on Village Health Sanitation and Nutrition Committee meeting and Village Health and Nutrition Day.

4.2.5.3 Digital technology for work coordination.

'Digital technology is very much helpful but according to me, we should accept the realities of the field and report them as they are (truthfully). There is a system of monitoring of IEC activities on Mamta day, which can be done with a visit on the same day. This communication is coordinated effectively with mobile phones at the district, block and up to sub-centre level' as expressed by CDHO during In-Depth Interview.

Further, it is important to note that the technology has been proved as an effective tool to store, share and coordinate on filed real-time data with the authorities to maintain supply chain management and also taking up an important decision for health care concerns of the area.

4.2.6 Barriers related to Health Communication Strategies

The CDHO and BHO staff received information about the effectiveness of media used and the achievement of behavioural objectives. For example, during *Mamta* day if women are asked about the name of the vaccine many of them can answer and some may not.

This means there was a huge gap among beneficiaries as far as their knowledge regarding health is concerned. For example, the name of vaccines, doses and their schedule for their children *etc.* The perception of individuals may vary because of variation in age, educational status, experience and intelligence level.

As mentioned by the CDHO about barriers,

'there is a long way to go for us as far as health behaviour change and health communication are concerned, some people can access to all communication media, but not able to accept/adopt message properly. Health programmes are planned to achieve objectives qualitatively and quantitatively, but sometimes quality is compromised with regards to determinants of health.'

4.2.7 Recommendation for Future Health Communication Strategies Conclusion of the in-depth interview with the CDHO

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, he suggested the following 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 could 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.

4.3 Profile of the ASHAs

4.3.1 Variables of the ASHAs

Table 25

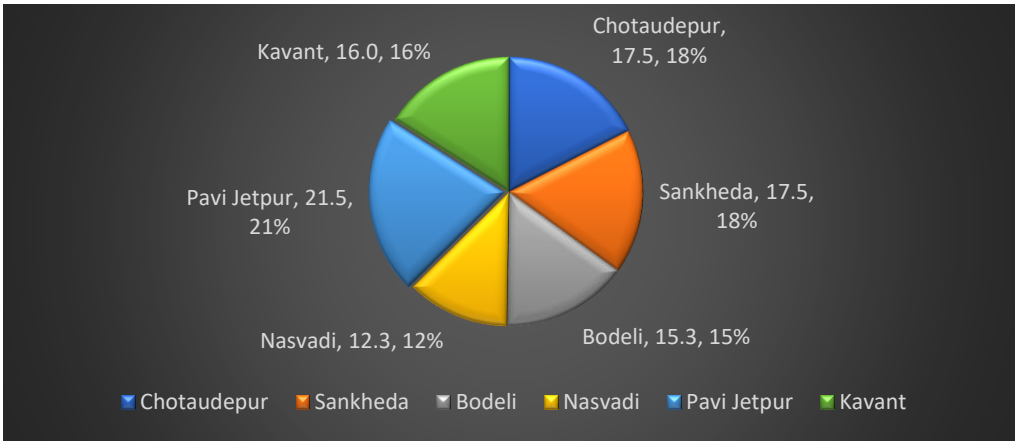
Distribution of the ASHAs according to selected Variables under the Study **n=326**

Variables	Categories	f	%
Block	Chhotaudepur	57	17.5
	Sankheda	57	17.5
	Bodeli	50	15.3
	Nasvadi	40	12.3
	Pavi Jetpur	70	21.5
	Kavant	52	16.0
Age	Older	146	44.8
	Young	180	55.2
Educational Qualification	Primary	43	13.2
	Secondary	152	46.6
	Higher Secondary	119	36.5
	Graduation	12	3.7
Work Experience	More	210	64.4
	Less	116	35.6
Media Use	High	131	40.2
	Average	113	34.7
	Low	82	25.2
Occupational Skills	Excellent	155	47.5
	Moderate	130	39.9
	Poor	41	12.6
Training received under	Completely trained	292	89.6
NHM	Partially trained	34	10.4
Knowledge regarding	High	89	27.30
Health Communication	Medium	185	56.75
Strategies	Low	52	15.00

Block: It can be seen from table 25 and figure 21 that the higher number of the ASHAs belonged to Pavi Jetpur (21.5%) followed by similar 17.5% were from Chhotaudepur and Sankheda blocks, sixteen % represented Kavant block and rest (15.3%) were from Bodeli block.

Figure 21

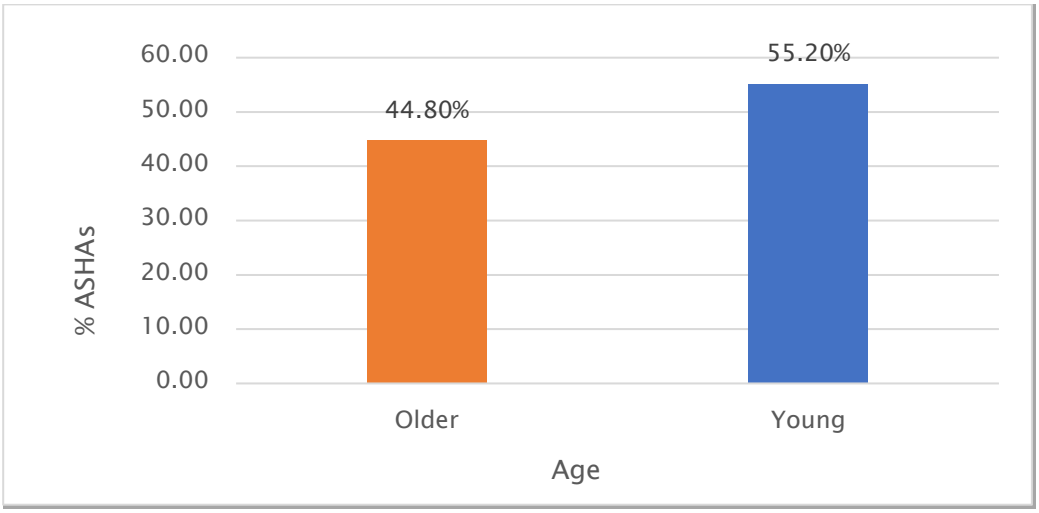
Percentage Distribution of the ASHAs according to Blocks They Belonged to **n=326**



Age Table 25 and figure 22 show that little more than half (55.2%) of the ASHAs belonged to older age group, whereas little less than half (44.8 %) belonged to the young age group.

Figure 22

Percentage Distribution of the ASHAs according to Age **n=326**

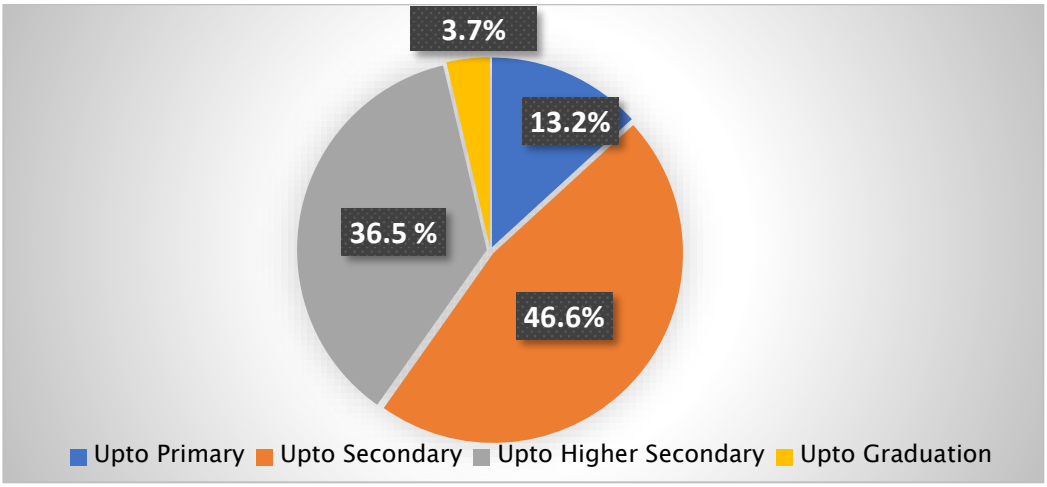


Education: Selected ASHAs were highly clustered around Secondary and Higher Secondary level of Education, table 25 reveals that 46.6% had education up to Secondary level and 36.5% studied up to Higher Secondary level. However, very few (3.7%) of the ASHAs were graduated from college and a few (13.2%) could study only up to Primary level.

Figure 23

Percentage Distribution of the ASHAs according to Educational Qualification

n=326



Work Experience: Table 25 and figure 24 show that more than half (64.4%) of selected ASHAs had more work experience whereas some (35.6%) had less experience as an ASHA under National Health Mission.

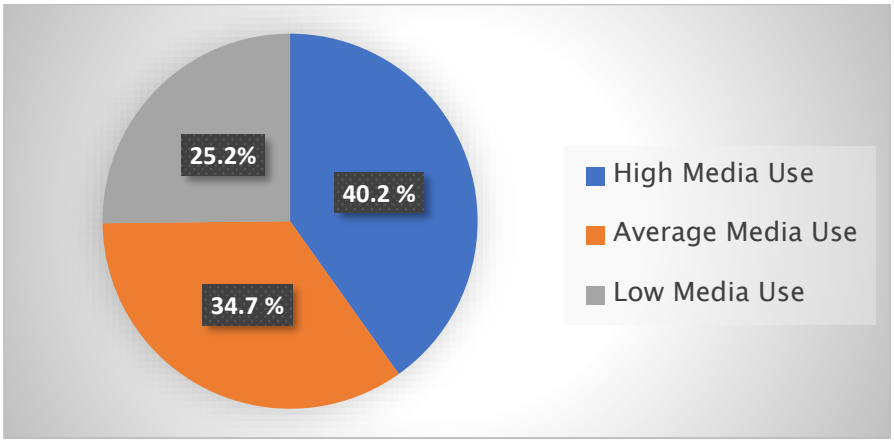
Figure 24

Percentage Distribution of the ASHAs according to Work Experience **n=326**

Media Use: Findings reflected in table 25 and through the figure 25, that higher percentage of the ASHAs (40.2%) had high Media use followed by 34.7 % and 25.2 % with average and low Media use respectively.

Figure 25

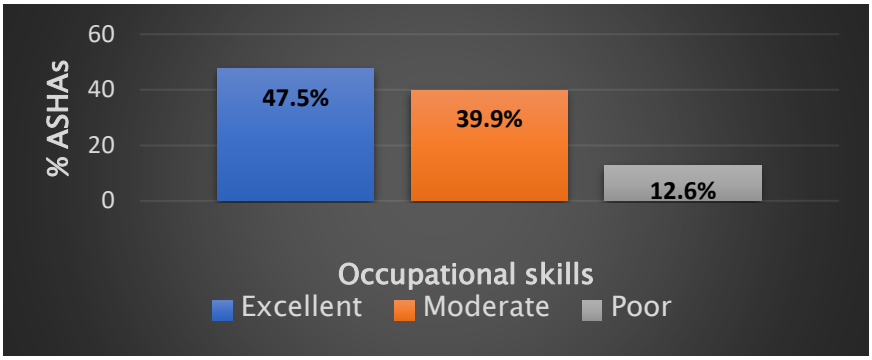
Percentage Distribution of the ASHAs according to Media Use **n=326**



Occupational Skills: Table 25 and figure 26 reveal that less than half (47.5%) of the ASHAs possessed excellent occupational skills. Rest of them were found to have moderate (39.9%) and poor (12.6%) level of occupational skills.

Figure 26

Percentage Distribution of the ASHAs according to Occupational Skills **n=326**

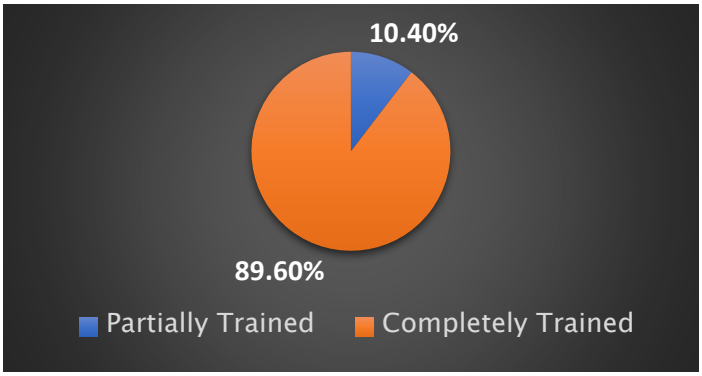


Training received under NHM: It can be seen from Table 25 and figure 27 that very high majority (89.6%) of the ASHAs have been completely trained. They had undergone training for all the seven modules and refresher training as prescribed by NHM guidelines. Whereas a few (10.4%) are partially trained. This means they may not have any one or more modules from a total of seven modules and refresher training under NHM.

Figure 27

Percentage Distribution of the ASHAs according to Training received under NHM

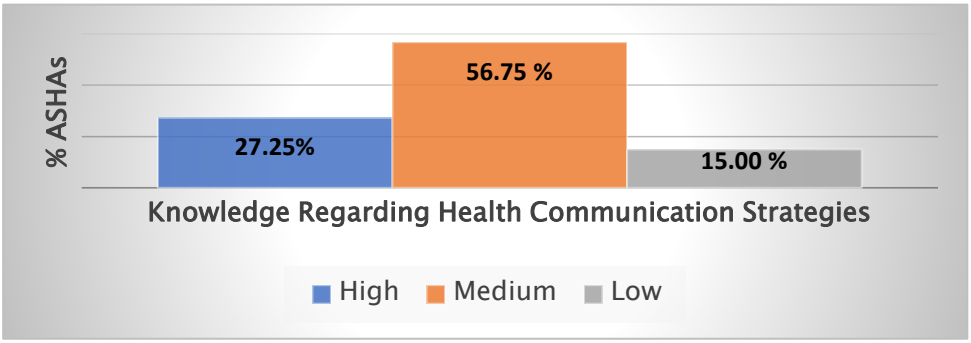
n=326



Knowledge regarding Health Communication Strategies: It can be seen from the table 25 and figure 28 that little more than half (56.75%) of the ASHAs had a medium level of knowledge about Health Communication Strategies. However, less than one third (27.30%) had high and fifteen per cent of the ASHAs had a low level of knowledge about Health Communication Strategies.

Figure 28

Percentage Distribution of the ASHAs according to Knowledge Regarding Health Communication Strategies **n=326**



4.3.2 Personal Information of the ASHAs

Table 26

Distribution of the ASHAs according to Personal Information **n=326**

Variable		Categories	f	%
Marital status		Married	297	91.1
		Widow	17	5.2
		Divorcee	4	1.2
		Separated	1	0.3
		Unmarried	7	2.1
Language		Read	325	99.7
Competency*	Gujarati	Write	323	99.0
		Speak	323	99.1
		Read	249	76.4
	Hindi	Write	223	68.4
		Speak	196	60.1
Caste		General	7	2.1
		SC	45	13.8
		ST	223	68.4
		OBC	46	14.1
		Others	5	1.5
Total Monthly Family Income		High	216	66.3
		Low	110	33.7
No. of Family Members		More	173	53.1
		Less	153	46.9
Type of Family		Nuclear	117	35.9
		Joint	183	56.1
		Extended	26	8.0

***Multiple responses**

Marital Status: Findings revealed that selected ASHAs were distributed with respect to their marital status. It can be seen from the table 26 that very high majority (91.1%) of them were married and rest of them belonged to categories of Widow (5.2 %), Separated (0.3%) and Unmarried (2.1%).

Language Proficiency: Hindi being National and Gujarati-the regional language, an attempt was made to check the proficiency of selected ASHAs for both these languages. Table 26 reveals that almost all (99.7%,99.00% and 99.10%) of the ASHAs could read, write and speak Gujarati- the regional language. Moreover, the majority (76.4%, 68.4% and 60.1%) could read, write and speak Hindi-the national language respectively.

Cast: Findings regarding the cast of the respondents, revealed that majority (68.4%) of the ASHAs were from Scheduled Tribe followed by 14.1%, 13.8%, 2.1% and 1.5% belonged to OBC (Other Backward Caste), Schedule Caste, General and Other castes respectively.

Total Monthly Family Income: In this case, it was found that almost two-thirds (66.3%) of the ASHAs had high monthly income whereas one third (33.7%) of the ASHAs had low monthly family income.

Number of Family Members: It can be seen from the table 26 that there was not much difference in categories related to a number of members at the family of selected ASHAs. From the ASHAs, little more than half (53.1%) had more and little less than half (46.9%) had fewer members in their respective families.

Type of Family: Table 26 shows that little more than half (56.1%) of the ASHAs had joint family, whereas little more than one third (35.9%) and a few (8.00%) were from a nuclear and extended type of family respectively.

4.3.3 Work-related Information of the ASHAs

Table 27

Distribution of the ASHAs according to Work-related Information **n=326**

Variable		Categories	F	%
No. of assigned Villages		One (1)	**273**	**83.7**
		Two (2) and more	53	16.3
Population covered		Large	135	41.4
		Small	**191**	**58.6**
No. of Households in the assigned		More	141	43.3
area		Less	**185**	**56.7**
Place of Visit	For Delivery	PHC	**248**	**76.1**
for medical		CHC	**294**	**90.1**
advice and	For ANC check-up	PHC	**247**	**75.8**
Treatment*		CHC	**245**	**75.1**
	General Patients	PHC	**257**	**78.8**
		CHC	160	49.1
Mode of Transport used *		Ambulance '108'	**300**	**92.3**
		Walking (Foot)	**212**	**65.2**
		Auto Rickshaw	**203**	**62.5**
		'Khilkhilat' van	164	50.5
		Govt. Vehicle (PHC/CHC)	152	46.8
No. of Working hours		More	138	42.3
		Less	**188**	**57.7**

***Multiple responses**

No. of assigned Villages: It was found that very high majority (83.7%) of the ASHAs were assigned one village to work and deliver their services. However, the rest of

them i.e. 16.3 % were designated for delivering their services to more than one village area.

Population covered: Table 27 shows that less than half (41.4%) of the ASHAs covered the large size of the population and more than half (58.6%) covered a small population under their services.

Number of Households in the assigned area: It is reflected from table 27 that less than half (43.3%) of the ASHAs catered to a greater number of households and more than half (56.7%) had a smaller number of households in their assigned area.

Place of Visit for medical advice and Treatment: It can be seen from table 27 that a very high majority (90.1%) of the ASHAs took pregnant mothers to the Community Health Centre for delivery of the new baby. An almost similar high majority of them took mothers for ANC check-up at the Primary Health Centre and Community Health Centre. Whereas the majority (78.8%) of the general patients were taken to PHC preferably first and then at the CHC by the ASHAs.

Mode of Transport used: Table 27 depicts that emergency ambulance '108' was at most used by the ASHAs i.e. 92.3 % as a mode of travel for taking ANC/PNC mothers. A majority (65.2%) of the ASHAs had to walk up to their service area as well as up to the health facilities. Almost similar (62.5%) use Auto rickshaw, followed by *Khilkhilat* (50.5%) for bringing home newborn with mother after delivery from the hospital. PHCs and CHCs were provided with a four-wheeler, which were used by 46.8% of the ASHAs.

Number of Working hours: Selected ASHAs were categorised according to their working hours. Table 27 depicts that less than half (42.3%) of the ASHAs work more hours whereas more than half (57.7%) work for comparatively a smaller number of hours for delivering their services.

4.3.4 Training received by the ASHAs

Table 28

Distribution of the ASHAs according to Module wise Training received under NHM

n=326*

Module	f	%
Module-1 Introduction	301	92.3
Module-2 Maternal and Child Health	301	92.3
Module-3 Family Planning, RTI-STIs, HIV/AIDS and ARSH	300	92.0
Module-4 National Health programmes, AYUSH and Management of Minor Ailments	299	91.7
Module-5 Role of ASHA	307	94.2
Module-6 Maternal and New-born care	315	96.6
Module-7 Child Health and Nutrition	310	95.1
Refresher training for Module 6 & 7	287	88.0

***Multiple responses**

Table 28 reveals that very high majority (96.6%) of the ASHAs had undergone training for 'Module-6 Maternal and New-born care' followed by 95.1% and 94.2% got trained for 'Module-7 Child Health and Nutrition' and 'Module-5 Role of ASHAs' respectively.

Similar (92.3%) number of the ASHAs received training for 'Module-1 Introduction' and 'Module-2 Maternal and Child Health'. Training for 'Module-3 Family Planning, RTI-STIs, HIV/AIDS and ARSH' and 'Module-4 National Health programmes, AYUSH and Management of Minor Ailments' received by 92.0 % and 91.7 % respectively and 'Refresher Training' (Module 6 and 7) was attended by 88.00% of ASHAs which is lowest among all. Module 6 and 7 covered most of all the topics and learning from module 1 to 5, therefore titled as Refresher training.

4.3.5 Responses of the ASHAs during FGDs

4.3.5.1 Changes observed by the ASHAs in own self. The participant ASHAs enumerated on the first question i.e. ***'What kind of changes have you observed in own self after joining as an ASHA?'*** during FGD. Responses are listed in the box as verbatims. Following the qualitative analysis method, firstly transcripts were prepared then based on analysis, the investigator had classified them under two sub-themes i.e. personal and professional level changes/improvements observed by the individual ASHAs.

Theme	Sub-Themes
Changes observed by the ASHAs in own self	Personal level Professional level

Box 3

Verbatims on Personal level Changes Observed by the ASHAs in Own Self

Personal level changes observed by the ASHAs in own self
'બાર જઈએ તો એક-બીજાને મળીએ, પરિચય થાય. બારનુ જાણવા મળે. જે નતા જાણતા એ જાણીયે અને ગામ માં લોકો ને સમજીયે.' *(when one goes out of the home can meet and get familiar with others. One learns to understand the outside world and new things. After learning the only one can disseminate it to others)- describing on personal family barriers.*
'પહેલા તો આપણે ગામ માં જઈએ ને તો આપણને બીક જ લાગતી, શું કહીશું , કેવી વાત કરીશુ. હવે તો આપણને બધા ને ખબર પડી ગયી કે હુ આ લોકોને કહેવુ છે, આપણને એમની જોડે કેવી રીતે વાત કરવી છે, બધુ હવે અમને ખબર પડી.' *(Before induction in ASHA programme, I used to be very scared of going out in a village, remained confused and hesitant while interacting and sharing. Now we know how and what to talk with people in a village.)*
'પહેલા બાર જવાનો ડર હતો, પણ હવે વ્યક્તિ ની બીક કે ધક નથી. જેમ કે બજાર જવુ હોય, બોડેલી, બરોડા, બધે જવાય છે.'

(was scared of travelling alone or going to the bazaar, Bodeli, Baroda....now I can alone move out everywhere)
'હવે તો નોકરી કરવામાં મજા આવે. પહેલા તો છોકરા ને લઈને નોકરી કરતા. હવે છોકરા મોટા થઈ ગયા. હવે છોકરાઓ ને પણ એમ થાય કે... મારી મમ્મી નોકરી કરે તો અમે પણ ભણીને નોકરી કરીશું. એમનો પણ ઉત્સાહ વધે છે.' *(I enjoy my work, I used to take my kids along during my work, now they have grown up and felt proud of me. They say that they want to take a good education and do a job like me.) – with contentment.*
'પહેલા ઘરમાં કોઈ બિમાર થાય તો મને ટેન્શન થતુ પણ હવે તો હું જ પોતે તેને દવાખાને લઈ જઉં છું.' *(I used to get tensed during the sickness of any family members, now I take charge of everything and take them to hospital.)*
'કુટુંબ તો પછી, પણ પહેલા પોતાની જાત ઉપર આજે આપણને એટલું બધુ માન લાગે છે કે.. ના હું કંઈક કરું છું ને.. સેવા માટે, બીજા માટે હું કંઈક કરું છું. હવે એટલો બધો આપણને પોતાના પર વિશ્વાસ આવે અને ખરેખર આમ આપણને ઉત્સાહ રહે.' *(besides family, first of all, I have observed an increase in my self-esteem as I extend my help for the health care of others, it is like self-less offering to people. It has given me self-respect and foster enthusiasm in me.)*
'આશા બેન તરીકે જાતે નિર્ણય લેતા, ધારો કે કોઈ કેશ મળ્યો તો પહેલા શું કરવાનું છે, પહેલા તપાસ કરવાની પછી રેફર કરવાનુ અથવા તો જે મેડમ છે એમને આપણને ફોન કરવાનો, એટલે વ્યક્તિગત રીતે આપણને એટલો નિર્ણય લઇ શકીયે છીએ.' *(I have learned to take independent decisions in any situation, for example, if any patient/case approach to me then I do a preliminary examination if required then call and refer to Madam (Doctor))*
'જ્યારે પોતાના છોકરા જન્મ્યા હતા એ સમય પહેલુ પીળુ ધાવણ નતું ધવડાવ્યુ. પણ અત્યારે ખબર પડી, એટલે બીજા ને સમજાવ્યે છે. અત્યારે અમે એમ વિચારીએ કે અમને ખબર હોત તો અમે કેટલી કાળજી લીધી હોત.' *(Was ignorant about colostrum, when our kids were born. As we are very well aware about its importance, we insist to all new mothers and their family to give it their new-borns. We regret if we would have known it then definitely cautiously have adapted it for our kids.)*

'એક દિવસ અગરબત્તી નહીં કરો તો ચાલશે. પણ એક બાળક કે માતા નો જીવ બચાવશો તો પુણ્ય મળશે. અમે નોકરી કરીએ એવું નહિં માનતા... અમે તો લોકોની સેવા કરીએ. લોકોના આશીર્વાદ હશે તો ઉપરવાળો મેહર કરશે...'

(It is okay if we miss on to follow daily religious rituals but saving the life of a mother or a new-born is equal to worshipping God. We serve human beings in need so they will bless us and hence GOD will also consider. Service to mankind is equal to worship to God.)

While proudly sharing personal experience, one ASHA said that she was a housewife; she could not talk to people effectively. She was very shy and had problems talking to strangers. Once, she started working as an ASHA, gradually, she began to interact with people clearly and effectively.

ASHAs were also hesitant and scared while moving out to places like a bazaar, other blocks and cities. The scenario is changed after their appointment. They not only move alone for their reasons but also for fulfilling their duties.

One ASHA from Bar PHC, Pavi Jetpur (with satisfaction) mentioned that, her children are very proud of her mother (ASHA) and desired to join job as of their mother. It was reported that,

'પહેલા ઘરમાં કોઇ બિમાર થાય તો મને ટેન્શન થતું હતુ પણ હવે તો હું જ પોતે તેને દવાખાને લઇ જવું છું.'

(I used to get tensed during the sickness of any family members, now I take charge of everything and take them to hospital.)

These remarks demonstrated their presence of mind and decision-making abilities in difficult situations at the family level.

The ASHAs have taken their work as service to mankind and society. During their discussion, it was highlighted that,

'એક દિવસ અગરબત્તી નહીં કરો તો ચાલશે. પણ એક બાળક કે માતા નો જીવ બચાવશો તો પુણ્ય મળશે. અમે નોકરી કરીએ એવું નહિં માનતા... અમે તો લોકોની સેવા કરીએ. લોકોના આશીર્વાદ હશે તો ઉપરવાળો મેહર કરશે...'

(It is okay if we miss on to follow daily religious rituals but saving the life of a mother or a new-born is equal to worshipping God. We serve human beings in need so they will bless us and hence GOD will also consider. Service to mankind is equal to worship to God.)

It was found and reported by almost all the ASHAs about improvements in their personal development after initiating work in the village as a health care activist. They shared that they acquired knowledge and skills which were essential for their personal and professional development due to exposure to many learned and professional people as well as applying knowledge and skills while overcoming daily challenges in the village.

Box 4

Verbatims on Professional level changes observed by the ASHAs in own self

Professional level changes observed by the ASHAs in own self
તાલીમ માં અમને શિખવાડયુ કે કેવી રીતે પરિચય આપવાનો. આપણે હારા સ્વભાવથી બોલિયે તો આ લોકો આપણા ને હારી રીતે રાખે.' *(During training we were taught how to introduce and behave with all. If we maintain good discourse then everyone around will treat us nicely.)*
'અત્યારે બેનો બધી જ સામે થી પૂછે. ૯૦ દિવસ થી અંદર નોંધણી થઇ જાય. પેલા ડિલીવરી થઇ જાય ત્યારે ખબર પડતી..તી. હવે ૧-૨ મહિના થાય એટલે સામે થી કહી દે.' *(Now women are more open and on their own come to us for their ANC registration. There was a time when neighbours and others would know only after the arrival of a new baby in the family.)*
'હામે વાળો ગુસ્સા થી વાત કરતો હોય તો, આપણને શાંતિથી સમજાવો પડે.' *(We need to keep calm and explain properly when the other person is anxious.)*
'જ્યારે બાળક ઓછુ વઝન વધુ હોય ત્યારે એનુ કંગારૂ કેર કરતા પણ શિખવાડયુ હતુ ... તો એ બાળક ને આમ કરી ધવડાવવાનું પછી લપેટવાનું જેથી એનુ વઝન વધે અને એને હૂંફ મળે.'

(In case of Low-birth weight baby, we teach for Kangaroo care method, breastfeeding technique, wrapping and all so that the baby feels warm and gains weight.)
'તાલીમ લીધા પછી તો ઘણુ બધુ પરિવર્તન આવ્યુ છે. આપણે જે કામગીરી કરતા હતા જેમ કે કઇ રસી ક્યારે મુકવાની, આગળ કઇ કામગીરી કરવાની છે, આશા બહેન તરીકે હું કરવાનું એ.' *(Training helped us in learning all about vaccination, related procedures to be followed etc.)*
'તાલીમ મળ્યા પછી તેમની નોંધણી, સોનોગ્રાફીની તપાસ, શું ખાવું જોઇએ તે બધા વિશે જાણકારી આપીએ છીએ.' *(We are trained for ANC registration, the importance of ANC check-up and sonography)*
'મેડમ, આશા બેનોની નોકરી ૨૪ કલાકની હોય, ગમે ત્યારે જવું પડે.' *(Madam, our duty as -ASHA is for 24 hours, anytime we have to attend (emergency))*
'આશા બેનો પણ ૧૦૮ ની જેમ દોડે' *(ASHAs work like an emergency ambulance -108)*

ASHA shared that they have learned to introduce themselves, interact with people and were able to do their job effectively. Concepts related to health care was explained to them during training. They mentioned about a refresher course regarding different duties and responsibilities of an ASHA as well as training for improving communication skills.

They received training about procedures to be followed at PHC, their duties and role of an ASHA at the village level. They learned to explain how to take care of an underweight child, kangaroo care and feeding the new-born. ASHAs have observed that they witnessed the change in their abilities after training, citing that earlier they were unaware about the procedure of vaccination. One of ASHA stated that people consider their advice, as they have received training. Since she belongs to the same community people have developed faith in them.

Majority of the ASHAs have observed and shared confidently that the deliveries in CHC have increased as they discourage deliveries at home. After their training about 'ANC, PNC, the importance of institutional delivery, care and hygiene to be maintained during delivery', they were able to convey the same to the community women especially ANC-PNC mothers and their family members.

ASHA training has professionally prepared them to move ahead, speak in public, beneficiaries who were earlier hesitant to share their issues also started approaching ASHAs for queries, seek their advice, getting treatment and regular health check-ups. They are available to handle any emergency in the community. As expressed by the ASHAs,

'મેડમ, આશા બેનોની નોકરી ૨૪ કલાકની હોય, ગમે ત્યારે જવું પડે.'

(Madam, our duty as -ASHA is for 24 hours, anytime we have to attend (emergency)) said in respect to the facilitator

This reflected their devotion and commitment to their duty when they said,

'આશા બહેનો પણ ૧૦૮ ની જેમ દોડે'

(ASHAs work like an emergency ambulance -108) which created laughter among the group during FGD.

Moreover, the uniform has given them identity as health care volunteer among health care staff and community people. During their trip to the hospital or visit to the community, villagers identify them by their uniform and they extend their help and support immediately if needed. The uniform has made their task easy as well as winning the confidence of beneficiaries while introducing her concern for community health. Subsequent training has resulted in desired capacity building among ASHAs. With the course of time and constant efforts, most of the ASHAs have now won the confidence of people and have established their credibility as a health worker.

4.3.5.2 ***Changes in the Perspectives of Family and Community Observed by the ASHAs.*** During the FGDs, the ASHAs were questioned about ***the changes they have***

observed among family and communities towards them and their work after they were appointed an ASHA. Some of the expressions of the ASHAs are listed in the boxes as verbatims. It was found that there were obvious changes in the perspectives at various levels, which have been classified under three sub-themes i.e. family, community and organizations.

Theme	Sub-theme
Change in the perspectives	Perspectives of Family Perspectives of Community Perspectives of Government Officers and Health Organizations

Box 5

Verbatims on Changes in Perspectives of the Family

Changes in Perspectives of the Family
'ઘેર ના ઘેર, તો કઇ જગ્યાએ જવા ના મળે અને કંઇ નહિં. પણ જ્યારથી આશા તરીકે કામ કરીએ ત્યારથી પરિવર્તન માં બધું બહુ પરિવર્તન આવે છે.' *(I used to be at home all the time…was not going anywhere, was nothing much in life except that household chores, but after joining as ASHA-a BIG change has come in my life)*
'ઘેર તો અમે રહેતે 'લા, ઘર કામ કરીએ, ભૈંસો રાખીએ, ખેતરો માં જઇએ- એજ કામ કરતા અને કોઇ હોમુ આવે તો - ઓઢી દઇએ. અમારા સમાજમાં મર્યદા વધારે. માથે થઇ લુંઘડુ પડવું ન જોઇએ. પણ નોકરી કરીએ છે તો થોડુ એમા પરિવર્તન આવ્યુ એમ. અમારું માન વધ્યું.' *(My life was all surrounded by household chores, taking care of livestock, laborious farm work…Had to keep our head covered, our community is very rigid for this custom…since now I am working there has been a change in this, I enjoy the freedom of moving without covering my head…they (family and society) have started paying respect to me.)*

'પહેલા, સાસુ પણ હેરાન કરતા 'તા પણ હવે તો - મારા છોકરાના વહુ નોકરી કરે છે ને ! મારા સસરા એવુ કહે કે માધવસિંહની વહુ નોકરી જાય છે તો મારું પણ માન વધ્યું. એવુ કહે છે. એટલે ખુશ છીએ બધા. અને અમે પણ ખુશ છીએ.' *(I was a victim of domestic harassment from mother-in-law…she has changed drastically…taking pride in me by saying that my-daughter-in-law is earning. All are happy and I am too.)*
'કુટુંબમાં માન મળ્યું અને પ્રોત્સાહન મળ્યુ વધારે કામ કરવાનું, ઘરનું ને બારનું બધુજ કામ.' *(There is an increase in respect and motivation from the family side....both for household and job-related decisions)*
'કુટુંબના પણ સાથ-સહકાર આપે છે.' *(Family has become cooperative in sharing work and responsibilities)*
''કુટુંબ માં પણ સારુ લાગે છે, કેમકે પોતાના જાતની આવક લઈયે છીએ. કોઈની પાસે લાંબો હાથ કરીને માંગવું પડતું નથી. કુટુંબ ના સભ્યો પણ માને છે કે કુટુંબની વહુ આશા બહેન ની નોકરી કરે છે.' *(There is a feel-good factor in the family. I feel independent since now I also earn and support to them. I don't need to ask for money. The family feels proud of me being an ASHA)*

ASHAs responded that they have been supported well by their family members. Family members respect their responsibilities and provide freedom for moving out for emergencies at odd hours.

ASHA from Bar PHC, Pavi Jetpur, expressed that she has seen the change in the attitude of her in-laws also.

'My mother - in - law proudly tells people that my daughter in law is an ASHA'.

It was found from the conversations, that family support is highly important for them to work without worrying about their children and other family members.

Sometimes there were incidences, where they had to stay in hospital with a pregnant woman for whole day and night too. In this case, ASHA could only help others if she is mentally strong. Family support is a very essential factor to fulfil commitment towards her work.

Majority of the ASHAs from all six blocks during FGD sound very confident while stating that, they have become financially independent and supportive to their family. All these together have made them empowered in terms of financial, social, family and health aspects.

Box 6

Verbatims on 'Change in the Perspectives of Community

Change in the Perspectives of Community
'પહેલા ગામમાં અમને બધા એક વહુ તરીકે ઓળખતા હતા. હવે બહેન તરીકે, આશા બહેન તરીકે બોલાવે છે.' *(Our identity was limited to Bahu(daughter-in-law) of a particular family, they now address us as Ben (ASHAben))*
ગમે તે હોય તો શિક્ષકો કે સંચાલકો ને ઓછું પૂછે. આશા બહેનો ને જ પૂછે. ' *(In any condition, people approach to ASHAs first, not to teachers, administrators or Anaganwadi Workers)*
દારૂ પીવા વારો પણ નમસ્તે આશા બહેન- એમ કહે (સમ્માન).' *(Even a drunk person also pays due respect and greet by saying 'Namaste ASHAben')*
'ગામમાં પરિવર્તન ખુબ જ આવી ગયું. પહેલા લોકો ગમે તે નામથી બોલાવતા હતા, પણ હવે આશા બહેન કહીને-માન થી બોલાવે છે.' *(There is drastic change in villagers. Earlier they used to address with any name (no respect) but now they have started calling them ASHA ben with due respect.)*
'પહેલા ભેદભાવ રાખતા, પણ હવે એવું નથી.' *(We have experienced discrimination in community)*
'ગામમાં જઈએ એટલે પહેલા અમને ફોનએ જ કરે જે પણ તકલીફ વિશે જણાવે છે.' *(As they(villagers) see us in the village they call or personal approach for their health concerns.)*

Community people have realized the fact that ASHAs have been equipped with occupational skills viz. knowledge of women and children health care, treatment of common ailments, TB, Leprosy, strategies for the prevention of disease in the community etc.

Therefore now, they have received recognition and respect from the people of their village. It was reported by the ASHAs that,

> *'પહેલા કહેવા શર્માતા હતા, પણ હવે ગમે તે પ્રોબ્લમ હોય તો છુટ થી કહે.'*
> *(there was hesitance, but now women freely share about any health-related issue with them.)*

It was discussed and noted during FGDs, ASHAs have expressed it empathetically that the major changes in the increase in a number of institutional deliveries have taken place rather than in following the traditional practices related to pregnancy in the villages. Earlier, people used to call for *Dai maa* (Traditional Birth Attendant) to conduct delivery at home, which was a risky and unhygienic approach. Resulting from the constant efforts in creating awareness, people now started sending their daughters-in-law to hospital for delivery. Women are made aware of the importance of care during pregnancy, diet and nutritional requirements, danger signs and symptoms during each phase of pregnancy. This was found the most significant achievement of the ASHA.

> *'જ્યારે અમે આશા તરીકે કામ ન્હોતા કરતા ત્યારે અમારા વિસ્તારમાં ઘરે પણ ડિલીવરી થઇ જતી. અત્યારે ઘરે-ઘરે ફોલોઅપ કરીએ છે. કોઇ ઘરે ડિલીવરી કરાવતા નથી અને અમે દવાખાને પહોંચાડીએ છે. અમે એમની સાથે પણ જઇએ છે.'*
>
> *(before our joining as ASHAs, household deliveries were very common in our tribal area. Now we do the follow-up with a home visit. For delivery, we take them to the hospital and we stay there with them too.'*

Unanimously all the ASHAs mentioned that earlier they were not welcomed during home-visits and women were apprehensive to share their health-related concerns.

The scenario has changed due to ASHAs' persistent determination for good work with genuine objectives. One ASHA addressing the FGD facilitator explained that,

> *મેડમ, પહેલા આશા બહેનો ને દુઃખ પડયુ. પહેલા તો કેવુ કહેતા ખબર કે- જવા દો ને આ તો રખડવા જાય. એમના ઘરવાળા કેવા છે કે જવા દે.'*
>
> *(Community people did not take ASHA's work as seriously. People used to talk loosely about ASHAs character and doubted by saying that ASHAs were just wondering around in the community. The husband was considered as not concerned about her wife for the character.)*

One of the ASHAs communicated that they had to visit all the households of the village to find pregnant woman, but now, husband or any family member inform the ASHA in the initial stage of pregnancy only.

> *'When anyone gets sick, they first come to us and then go to hospital'*

It was derived from the responses of the ASHAs that community people have opened up and became vocal about their health issues. They ask for contraceptives without hesitation. In the past ASHAs had to visit all houses and had to try hard to make them aware and sensitive towards their health issues. Now that people have realized the importance of good health and government benefits, they consult respective ASHA of their village for any of their health-related problems.

While recalling the past, an ASHA expressed that, family and patients used to worry a lot about illness or any health problems. Now family and patients rely on them as health worker of their village.

> *'We feel worthy of ourselves. We feel independent and we also love to work for the welfare of others'*

Majority of the ASHAs shared about the satisfaction of their work,

'*We are proud of ourselves that we are doing something good for people. We are encouraged to work and we feel good about our existence.'*

Another ASHA expressed satisfactorily that their post and meaning of nomenclature 'ASHA-a Ray of hope' has gained them additional respect in the village. Therefore, community people approach them in the first instance for any medical help.

Some ASHAs shared that earlier people did not allow them to stick posters on their walls and also did not let women come for polio drops for their children. With much relief, they expressed that now there is a positive change in perspective of the community in this regard.

While concluding on this aspect, ASHAs said,

'Ben (with respect addressing facilitator), what all struggle we shared with you about community people and family is now past. We have come a long way, they all (family and community) pay us due respect.'

Box 7

Verbatims on Change in the Perspectives of Government officers and Health organizations

Change in Perspectives of Government Officers and Health Organisations
'મીટીંગોમાં ને બધુ એવું જ કહે આશા તો પાયાની બહેન (કાર્યકર્તા) છે.' *(In all meetings with staff and officers, they say 'ASHAs are the foundation of healthcare delivery at grass-root level')*
હવે તો સરપંચ અને તલાટી કશુ ભી કામ હોય તો જણાવે છે.' *(for any village related work, Sarpanch and Talati call and inform us)*
'સાહેબો અને મેડમો સમજી ગયા છે કે ગામલોકોને ભેગા કરવા હોય તો આશા બહેન ચાવીરૂપ કામગીરી કરી શકે. કારણ કે એમને ગામમાં બધા જ ઓળખે.'

(All officers (male or Female) have accepted that 'the ASHA plays the key role in community mobilisation as she is known face to local people.')
સૌથી વધારે તો આશા બહેનો ની સાદી (સારી-યુનિફોર્મ) આયા પછી વધારે માન વધી ગયું. કોઇ પણ વ્યક્તિ બાહરથી આવે તો તરત જ તેમને ખ્યાલ આવી જાય કે આ આશા બહેન છે.' *(The Uniform (saree) has contributed immensely for getting due respect. Anyone can identify her with uniform and extend their support for ASHA's work)*

Further, from the discussion with the ASHAs, it was felt that they have earned respect from the Sarpanch, Talati and government officials who come for a visit or any health-related purpose. They proudly expressed that,

> '*any officer who comes to the village, prefer to consult with ASHA first, collect all details and then only they start with their work, officers believe that the ASHA understands needs of her village very well.'*

Government officers and donors from NGOs rely on ASHAs for understanding the need and problems of villagers. They give due respect as ASHAs are village-level health volunteer and activist. ASHAs with pride expressed,

> *'In all meetings/gatherings with staff and officers, they say 'ASHAs are the foundation of healthcare delivery at the grass-root level.'*

During the execution of any programme schemes, ASHAs have played an active role in mobilising people, be it for health or any welfare initiative taken up by the government. Hence during FGDs, majority of the ASHAs reported that,

> *'All officers (male or Female) have accepted that 'the ASHA plays a key role in community mobilisation as she is known to face local people.'*

The ASHAs were found to be satisfied, with regards to the recognition and respect given by the health staff at the hospitals. ASHAs expressed that,

'While escorting to patients and pregnant women to any hospital, the hospital staff attend us with respect (even when they are not known to each other) as they recognise our saree (uniform).'

Discussion:

The findings drew attention towards selected variables under study viz; age, education, work experience as an ASHA, media use, occupational skills, training under NHM and knowledge about Health Communication Strategies. These variables are crucial, as they characterise ASHAs under study.

Besides this, their personal information like marital status, language competency, caste, total monthly family income, number of family members and type of their family were also important. The profile of the ASHAs also highlighted their work-related other information i.e. number of assigned villages, population and household covered, place of visit for medical advice and treatment, mode of transportation used and working hours.

As per ASHA programme implementation guideline (2008), it is mentioned that 'ASHA must primarily be a woman resident of the village married/ widowed/ divorced, preferably in the age group of 25 to 45 years. She should be a literate woman with due preference in selection to those who are qualified up to 8th class wherever they are interested and available in good numbers. This may be relaxed only if no suitable person with this qualification is available.'

In interior far-flung areas where education is low, their appropriate candidate with a primary level of education can be appointed. Hence it can be seen that some (13.2%) of the ASHAs are appointed who had studied up to primary level and majority others had qualified for higher education level in tribal district, Chhotaudepur.

About data related to their personal media use and knowledge about Health Communication Strategies, it was observed that ASHAs varied with their use of media at a personal level. Forty percentages of the ASHAs had high media use. Almost ninety-eight % used mobile phones followed by television by a majority (68.4%).

Majority of the ASHAs possessed knowledge about Health Communication Strategies of medium level only.

Capacity building is an ongoing and integrated part of the ASHA programme in three ways namely; Induction training, Periodic pieces of training and On-the-job training. ASHAs' training is consisting of seven modules and one refresher training; in a course of time, they are trained to acquire the necessary knowledge, skills and confidence for performing her spelt out roles. Here, in this study few of them (10.4%) were found partially trained, the probable reason could be that, they were newly joined as ASHAs and therefore they were given training of combined module (5 to 7) and refresher course as a priority.

Under Module fifth, the ASHAs are trained for essential soft skills clubbed together as occupational skills viz. Coordination, Leadership, Communication, Decision-making and Negotiation. The quantitative data revealed the high significance of its effectiveness since a high majority of the ASHAs fell under the categories of excellent (47.5%) and moderate (39.9%) level of occupational skills and few of them needed improvement as they fell under the poor category of occupational skills.

FGD findings revealed the same trend that ASHAs are proved to be very effective and assertive in a discourse of their duties as a health activist. They have been enthusiastic in creating awareness on health and its social determinants and mobilise the community towards local health planning and an increase in the utilisation of the existing health services. They have earned credibility, respect and empowered status not only at a personal and family level but also in community and Health organisations in their areas.

Almost all the ASHAs were proficient in the local language- Gujarati and majority with Hindi, the very high majority were married and as under exceptional conditions of scarcity, seven unmarried women were appointed as ASHAs in their

respective areas. These would have helped them to be effective while dealing with community people and officers at various level.

According to Ministry of Health and Family Welfare, GoI (2005), one ASHA is to be appointed per 1000 of the population in rural and 1000-2500 people in an urban area. Chhotaudepur is a Tribal dominated geographical area where community settlements are scattered in nature. Therefore, in the present study, data reflected that the high majority (83. 7%) ASHAs are assigned one village and majority of ASHAs serve to the relatively smaller size of the population and a few numbers of households. A very high majority (92.3%) followed by 65.2% and 62.5% of the ASHAs used 'Ambulance -108' Emergency Ambulance followed by walk and Auto-Rickshaw for various purposes like 108 for taking ANC, PNC and other patients in an emergency to PHC and CHCs; walking up to PHC for attending meetings, escorting patients, arranging *Mamta Day* and for a home visit; auto-rickshaw/local sharing vehicle for reaching to health facilities and far interior places.

Concerning ASHAs and their certain characteristics, previous researches have recorded their observations. Among them, Kohli et al. (2015) and Arya (2016) had observed almost similar trends regarding age and education; Murthy and Vijayraman (2012) and Arya (2016) regarding almost universal availability of mobile phone for coordinating their work and emergency ambulance service for their clients, however with few exceptions like unavailability of transportation facility (14.5%) was noted by Kohli et al. (2015). Also, Zulliger et al. (2014) mentioned that even with limited education, Community Health Workers were significant providers of IEC including facilitation to support client's entry and maintenance in the formal health system. They incorporate local knowledge and understanding of illness in their communication with community people.

Hence Front-line Health workers, like ASHA should be completely trained in professionally required skills and knowledge to gain the confidence of villagers. IEC materials and other relevant requirements can strengthen ASHAs' role in society and also help in facilitating their role performance effectively.

4.4 Provision of Health Communication Strategies

4.4.1 Sources of Information related to Health for the ASHAs

Table 29

Distribution of the ASHAs according to Sources of Information **n=326***

Sources of Information related to Health	f	%
A) Graphic/Print media		
Mamta card (Health Card)	317	97.2
ASHA Diary	314	96.3
Chart/Poster	295	90.5
Register	295	90.5
Leaflet	293	89.9
Information booklet	266	81.6
Flipbook	259	79.4
Wall painting	246	75.5
Flashcard	228	69.9
Banner	228	69.9
Newspaper	201	61.7
Sticker	191	58.6
Magazine	130	39.9
Hanging mobile	114	35.0
B) Electronic Media		
Mobile	266	81.6
CUG Sim card	234	71.8
T.V.	216	66.3
Video Film	197	60.4
Radio	170	52.1
PowerPoint Presentation	155	47.5

Computer	114	35.0
Smart Phone	112	34.4
Laptop	108	33.1
Internet	103	31.6
Audio Clip	78	23.9
Application	74	22.7
C) Folk Media		
Street play	235	72.1
Folk Songs	221	67.8
Puppet show	135	41.4
D) Other media		
Sample	147	45.1

***Multiple responses**

Table 29 shows the percentage and frequency distribution of the ASHAs according to the sources they had or used to receive any information to keep themselves updated on the health and health care programme they are associated with.

It can be read from table 29 that among graphic and print media, most (97.2%, 96.3% and 90.05%) of the ASHAs received information from *Mamta card* (Health card), ASHA diary and registers respectively, provided as an ASHA kit to them on their induction to the programmes. A large group of ASHA's (90.50%, 89.9%, 81.6%, 79.4% and 75.5%) used chart/poster, leaflet, information booklet, flipbook and wall painting as sources of information. Whereas hanging mobiles, as a source of information was used by little more than one third i.e. 35.00 % of the ASHAs, which was found to be least used among Graphic and Print media.

Further, in the case of Electronic and New media, a very high majority (81.6%) of the ASHAs used a Mobile phone to receive any information related to health. It was found that for majority i.e. 71.8 %, 66.3% and 60.4 % of the sample used a CUG sim card, TV and Video film as the sources of information respectively. It was observed that the SATCOM programme was watched regularly every week by all the health care

staff at PHC/CHC respectively. Approximately one-third of them (35.00%, 34.4%, 33.1%,31.6% and 30.1%) respectively used Computer, Smartphone, Laptop, Internet and Community Radio. Among this list, Audio clip and Application was used by 23.9% and 22.7% of the ASHAs only.

It can be inferred that all these devices, ASHAs may or may not possess but they might have exposure and therefore, they would have mentioned them as sources of information.

Table 29 also shows that the majority i.e. 72.1 % and 67.8 % of the ASHAs, received information from Street play and Folk songs respectively. Whereas less than half (40%) the ASHAs received information through a Puppet show.

Further, under other media category, Samples were used as a medium of information by 45.1 % of the ASHAs only.

Table 30

Categorisation of the ASHAs according to Sources of Information **n=326**

Sources of Information	f	%
More sources	190	58.3
Less sources	136	41.7

It can be seen from the table 30 that majority (58.3%) of the ASHAs had more sources of information and others (41.7%) of the ASHAs had a less number of sources of information from where they receive health-related information and knowledge. It can be noted that during training and weekly meeting they are exposed to a variety of media and experts from the field. Therefore, a higher number of ASHAs may have reported more sources of information.

4.4.2 Provision of Health Communication Strategies under NHM to ASHAs

Table 31

Distribution of selected ASHAs according to Provision of Health Communication Strategies under NHM **n=326***

Provision of Health Communication Strategies under NHM	f	%
A) Graphic/Print media		
Mamta card (Health card)	305	93.6
ASHA Diary	303	92.9
Chart/Poster	286	87.7
Register	261	80.1
Leaflet	241	73.9
Information booklet	216	66.3
Banner	202	62.0
Flipbook	184	56.4
Wall painting	172	52.8
Flashcards	152	46.6
Sticker	139	42.6
Newspaper	104	31.9
Magazine	69	21.2
Hanging Mobile	43	13.2
B) Electronic Media		
Radio	233	71.5
CUG Sim card	214	65.6
Mobile	104	31.9
Video Film	62	19.0
TV	50	15.3
PowerPoint Presentation	44	13.5
Community Radio	36	11.0
Smart Phone	25	7.7
Laptop	25	7.7
Computer	24	7.4
Internet	21	6.4
Application	17	5.2
Audio Clip	16	4.9
C) Folk Media		
Street play	86	26.4
Folk Songs	72	22.1
Puppet show	47	14.4
D) Other media		
Sample	79	24.2

***Multiple responses**

Table 31 presents the data related to the Provision of Health Communication Strategies to the ASHAs. Among the Graphic and Print media category, it was found that most (93.6% and 92.9%) of them are provided with *Mamta card* (Health card) and ASHA Diary. A high majority (87.7%, 80.1% and 73.9%) the ASHAs had Chart/Poster, Register and Leaflets respectively. Whereas, few ASHAs (13.2%) reported that they were provided with Hanging mobiles.

Among electronic and new media, radio and CUG sim card were provided to majority i.e. 71.5% and 65.6% of the ASHAs. Whereas some of them (31.9%) had mobile phones given under NHM, others reported that either they were not provided or their mobile phones were not functional at the time of data collection. In support of this, CDHO can be referred to, as he stated,

> 'we hire and invite folk groups for Bhavai and other performances. Moreover, local NGOs have trained health workers and have organised such folk performances giving messages on health and about social determinants of health.'

As per table 31, a small group of the ASHAs were provided with a smartphone (7.7%), laptop (7.7%), computer (7.4%), internet (6.4%), application (5.2%) on mobile and audio clip (4.9%) here to note that, they may be referring to the availability of all these media at PHC/CHC or to the Female Health Workers.

Further, the table 31 also reveals that some of the ASHAs reported about the provision of Folk media i.e. Street play (26.4%), folk songs (22.1%) and Puppet show (14.4%). Some of the ASHAs i.e. 24.2% reported that they were provided with samples like IUD, male condoms *etc.* During 'Home Visit' and on 'VHND' they use IUD and condoms to show, explain and distribute. It may be possible that its supply is not managed timely from the government department.

Table 32

Categorisation of the ASHAs according to Provision of Health Communication Strategies under NHM **n=326**

Provision of Health Communication Strategies under NHM	f	%
More Provision	159	48.8
Less Provision	167	51.2

It is seen from table 32 that little more than half (51.2%) of the ASHAs were provided with less number of Health Communication Strategies followed by little less than half (48.8%) were provided with more number of strategies under NHM. The distribution was almost nearly half of the respondent ASHAs with regards to the provision of Health Communication Strategies under NHM.

There may not be direct provision and availability of media to the ASHAs, however, there was an indirect way of availability like display of the banner, hoarding, wall painting, performances, rallies, radio, TV campaigns *etc.* for awareness and mobilization.

Here it is important to record that the ASHAs' responses towards provision may be referred to the provision made by the Government health departments (State and District Health Societies), local NGOs and other stakeholders associated with

4.4.3 Responses of the ASHAs to the Provision of Health Communication Strategies under NHM

Similar nature of data was revealed during the FGDs conducted with the ASHAs when they were asked about **the provision of Health Communication Strategies to them for effective delivery of their services**.

Box 8

Verbatims of the ASHAs on Provision of Health Communication Strategies under NHM

Provision of Health Communication Strategies under NHM to the ASHAs
'ખોરાક અને પોષણ વિશે ના ચાર્ટ આપેલા છે.' *(We have charts on diet and nutrition)*
'ચાર્ટ, પોસ્ટર, ફ્લીપબુક પછી પોતાની આવડત પ્રમાણે માહિતી પણ આપી શકીએ છે.' *(We are provided with Chart, poster, flipbook and Mamta card which we use during delivering knowledge according to personal skills.)*
'અમને રસીકરણ માટે મમતા દિવસનો પડદો આપ્યો છે. મમતા તરૂણી પડદો આપેલો છે.' *(Backdrop/Banner for Vaccination and Mamta Day are provided)*
'બાળકને કેવી રીતે ધવડાવવાનું તે સમજાવવા માટે ચાર્ટ છે.' *(We have Charts on Breastfeeding positions)*
'ભીંત ચિત્રો દોરેલા છે- ગર્ભ નિરોધકો વિશે, ટી.બી. વિશે.' *(Wall paintings on TB and Contraceptives are available.)*
'આંગણવાડી માં અને દવાખાને પણ જુદા-જુદા વિષય પર ચાર્ટ/પોસ્ટરો લગાડેલા છે.' *(Posters/Charts on various topics are displayed at Hospital and in Anganwadi)*
'ધુમ્રપાન, તમાકુ, લેપ્રોશી વિશેના ચાર્ટ આપેલા છે.' *(We have charts on Smoking, tobacco and Leprosy)*
'બાળકના પણ ચાર્ટ આપેલા છે જેમકે રસી મુકતા, નાના બાળકને ખેંચ આવી હોય.'

(Charts portraying children, their vaccination and related danger signs of new-borns)
'રજીસ્ટરો, પોસ્ટરો (સગર્ભા, કુપોષણ, ટી.બી., સિકલ સેલ, રસીકરણ, મલેરીયા, સ્વાઇન ફલુ, જનની સુરક્ષાના, કેન્સર, ડાયાબિટીસ વિશે) મમતા કાર્ડ, રેડિયો આપેલો છે.' *(Registers, posters (pregnancy, malnutrition, TB, sickle cell anaemia, vaccination, malaria, swine flu, Janani Suraksha Yojana, Cancer, Diabetes), Mamta card (Health card) and radio are given to us.)*
'ફલીપબુકો આપેલી છે, સરકારની યોજનાઓ વિશે જેમ કે જનની સુરક્ષા યોજના માટે.' *(Flipbook on Government Health Programmes like Janani Suraksha Yojana)*
'નોંધ માટે આશા ડાયરી અને મમતા કાર્ડ આપેલ છે.' *(For record-keeping ASHA diary and Mamta cards are given.)*
અમારી પાસે ચાર્ટ, પોસ્ટર અને પ્રેઝન્ટેશન છે.' *(We have charts, posters and presentation)*
'પી.એચ.સી. પર સેટકોમ ના પ્રોગ્રામ મલેરીયા વિશે, સગર્ભા વિશે, ટી.બી. વિશે માહિતી કેન્સરનું બધુ સમજાવે.' *(We watch SATCOM programmes at PHC and learn more about malaria, Pregnancy, TB, Cancer, etc.)*

All the ASHAs responded that they have been provided with charts, posters related to malnutrition, TB, pregnancy, sickle cell, vaccination, malaria, swine flu, Janani Suraksha, cancer and mother and child care. All these help ASHAs to identify symptoms of diseases like malaria, leprosy, etc

Each ASHA on her induction was provided with ASHA kit (*Mamta* kit) which included ASHA diary, *Mamta card* and registers. One ASHA mentioned that diary is included in *Mamta* kit to enter details regarding pregnancy, HB, weight and about nutrition. Further, she added in a complaining tone that they are not provided with a diary regularly. The ASHA is also a depot holder means she is provided with a stock of medicines and contraceptives. For the record and related stock, she uses registers and diaries.

During field visits, meetings on *Mamta* divas and medical camp for women, Health Communication Strategies like flipbooks, presentations, *Mamta card* were used by the ASHAs for health education and to spread awareness among mothers, mothers-in-law regarding vaccination, nutrition and health care. The mention of Presentation was may be with reference to TeCHO mobile provided to Female Health workers which they may have used for explanation.

It was reported that,

'ભીંત ચિત્રો દોરેલા છે- ગર્ભ નિરોધક વિશે, ટી.બી. વિશે.'

(Wall paintings on TB and Contraceptives are available in the village)

They mentioned about wall paintings, display of charts and posters at Anganwadi and hospitals. SATCOM session/programme on Television were broadcasted for health care staff. ASHAs along with other health staff also watched and learned from these programmes.

During the Focus Group Discussion, **ASHA facilitators and Female Health Workers** participated and responded actively. They enumerated on the question raised by the investigators, regarding the provision of Health Communication Strategies, their responses are presented below:

4.4.4 Responses of the ASHA Facilitators to the Provision of Health Communication Strategies under NHM

Box 9

Verbatims of the ASHA Facilitators on Provision of Health Communication Strategies under NHM

Provision of Health Communication Strategies under NHM to the ASHA Facilitators
'સગર્ભાનું છે, રસીકરણનું છે, કેન્સર વિગેરે માટે છે.' *(We have materials on pregnancy, vaccination, cancer etc.)*
અમારી પાસે પોસ્ટરો, ફલીપબુક, માતા અને બાળક ની સમજણ માટે આપેલા છે નાના પોસ્ટરો, નાના બેનરો.' *(We have posters, flipbooks also small size posters and banners for explaining content related to mother and child health care)*

The participant ASHA Facilitators mentioned that they had charts, flip cards, booklets related to health care of mother and child, contraception, immunization, leprosy, TB, with pictures related to symptoms of leprosy, malaria and so on.
They also had flashcards on RCH, Community welfare, flip cards and pamphlets to be used during surveys and home visits.

They were provided with posters on policy like Janani Suraksha Yojana, anaemia, ante-natal and post-natal care, breastfeeding, new-born care at home, sign and symptoms of a high-risk baby for explaining to new mothers and their families.

4.4.5 Responses of the FHWs to the Provision of Health Communication Strategies under NHM

Box 10

Verbatims of the Female Health Workers on Provision of Health Communication Strategies under NHM

Provision of Health Communication Strategies under NHM to the Female Health Workers
'ચિત્ર વાળા, ઈલેક્ટ્રોનિક માધ્યમોમાં મોબાઈલ, ટેક્નો મોબાઈલ, પાવરપોઈન્ટ પ્રેઝન્ટેશન, સેટકોમ પ્રોગ્રામ, લોકમાધ્યમોમાં લાઉડસ્પીકર, માઈક, ક્યારેક નાટકો, લોકગીતો વિગેરે.' *(We have been provided with Pictorial media, TeCHO-mobile, PowerPoint presentation, SATCOM programmes; folk media like drama (bhavai), folk songs, PA system etc.)*
'તાલીમ વખતે પણ બુકલેટ અને ચાર્ટ (રસીકરણ) આપ્યા હતા.' *(During training booklet and chart for vaccination were given)*
'પેમ્પલેટ પણ આપેલા છે.' *(Pamphlets are also given.)*

During FGDs when being asked about the provision of Health Communication Strategies to Female Health workers, they expressed,

> *'Chitra vada, electronic madhyamo ma mobile,* TeCHO *mobile, PowerPoint Presentation, SATCOM programme, lokmadhyamo ma loudspeaker mike, kyarek natako, lokgito vagere'*

(We have been provided with Pictorial media, TeCHO -mobile, PowerPoint Presentation, SATCOM programmes; folk media like drama (bhavai), folk songs, PA system *etc.*)

It was shared that FHWs were provided with Media-mix consisting; graphic media like chart, poster, flipbook, flipcharts and booklets on specific diseases, electronic media like PA system for announcements, mobile phones-TeCHO mobile, presentation, SATCOM programmes *etc.*

It was also reported that during training and orientation they were given a booklet, pamphlet as reference material on vaccination, TB, Leprosy *etc.* They all were overwhelmed on receipt of TeCHO-mobile (smart) phone given by the health department for almost one year. It has pre-saved videos, PPTs and application to make possible real-time data-entry, maintaining records, work schedules *etc.*

Discussion:

Data collection through both, survey and Focus Group Discussions revealed that the participants (ASHAs, AFs and FHWs) were provided with some graphic and print media catering to their community activities and home visits. Moreover, it was reported by some of the ASHAs that they have been provided with posters and flipbooks on ANC-PNC and new-born care by Deepak Foundation-NGO working actively in Chhotaudepur district. Moreover, programme or issue-based IEC materials like leaflet, poster/charts, banners *etc.* were provided to the health workers for effective Health Communication activities. Majority of the ASHAs reported that they were provided with radio by Village Health Sanitation and Nutrition Committee and CUG SIM card under ASHA programme, from which most of the radios were not functional, whereas the majority of CUG cards were still in use.

According to Ministry of Health and Family Welfare, GoI (2017) under NHM, ASHA facilitators, Female Health Workers and PHC-Staff are to provide support regarding required facilities and information needs to local ASHA for delivery of all health-related benefits and encouraging community processes.

However, findings revealed that ASHA Facilitators were provided with some graphic materials like charts/posters, flipbooks, health cards *etc.* but not provided

with *Mamta* kit nor TeCHO-mobiles. Comparatively, Female Health Workers had more privileges as they were provided with TeCHO-mobile. It can be derived that to achieve effective community process as mentioned by NHM Guidelines-framework of implementation (2012-2017), the provision of Health Communication is not sufficient and uniform amongst the health workers.

National Health Mission is a flagship umbrella catering to all health concerns of people of all age group and sex. Each health concern requires special attention and tailor-made communication but at the same time, they all should have coherence and uniformity, which is missing in terms of production, provision and accessibility up to grassroots and specifically among grass-root level health workers.

The research findings imply that special attention should be given to coherence and uniformity in production of Health Communication Strategies, continuity and timely provision to all associated with community processes. It was also evident while, CDHO mentioned that the demand-supply assessed from grassroots (PHC), which is fulfilled by the District Panchayat office via District Programme Management Unit. This denotes that the grass-root level health workers may not be able to express needs with regards to Health Communication Strategies. The ASHAs under present study expressed that their personal media use was high to moderate, whereas their knowledge about Health Communication Strategies was average; such factors might have affected their demand for Health Communication Strategies and this further might have led to limited or less provision of Health Communication Strategies to them.

Therefore, researcher suggests to impart training on Health Communication Strategies to grass-root level Health Workers and systematic research on need – identification prerequisite to be carried out to achieve the objectives of effective community process as described by Ministry of Health and Family Welfare, GoI, in Framework for Implementation NHM (2012-2017).

4.5 Use of Health Communication Strategies

4.5.1 Use of Health Communication Strategies by the ASHAs

The present section explains the Use of Health Communication Strategies by the ASHAs based on the data gathered through a checklist of 31 Health Communication media (table 4) for each of the following activities;

- Home visit
- Planning and celebrating VHND (*Mamta* day)
- Visit Health Facilitates
- Village Health Sanitation and Nutrition Committee Meeting
- Keeping and informing about records.

Frequency and percentages were calculated and based on it, variable wise hypotheses were tested using t-test, ANOVA and Tukey's HSD tests for a total of all five activities and then similar calculations for each of the above-listed activities as applicable were adopted.

Here, the following subsections depict the overall use of Health Communication Strategies by the ASHAs.

Table 33

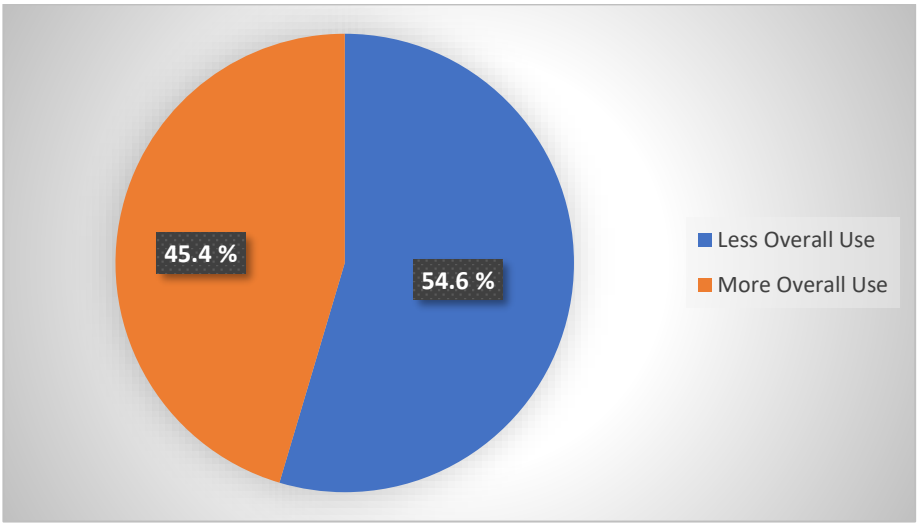
Distribution of the ASHAs according to Overall Use of Health Communication Strategies **n=326**

Overall Use of Health Communication Strategies	f	%
More Overall Use	148	45.4
Less Overall Use	178	54.6

Data from table 33 reveals that overall use of Health Communication Strategies by less than half (45.4%) of the ASHAs was more whereas a little more than half (54.6%) of the ASHAs used relatively less number of Health Communication Strategies.

Figure 29

Categorisation of the ASHAs according to Overall Use of Health Communication Strategies **n=326**



The ASHAs were compared for their sources of information, provision and use of Health Communication Strategies.

It can be inferred that the comparatively large group of ASHAs had a higher number of sources of information (table 30) but were provided with less number of Health Communication Strategies (table 31) and further they used still a lesser number of Health Communication Strategies.

Variable wise Differences in Overall Use of Health Communication Strategies

Table 34

t-test showing variable wise differences in Overall Use of Health Communication Strategies

n=326

Variable	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	38.31	18.56	0.25	0.803	NS
	Older	180	37.84	15.34	0.25		
Work Experience	Less Work Experience	116	35.14	16.57	2.34	0.02*	**Significant**
	More Work Experience	210	39.66	16.80	2.35		
Training	Partially Trained	34	34.2	15.6	1.4	0.163	NS
	Completely Trained	292	38.5	16.9	1.5		

***p<0.05, NS – Not Significant**

It is seen from the table 34 that Work Experience of the ASHAs had a significant influence on their overall use of Health Communication Strategies during their selected activities.

Therefore, the null hypothesis stating that there will be no significant difference between overall use and Work Experience was not accepted.

The significant difference may be due to the Work Experience in varied public health demands in the tribal area, existent social determinants of health using a variety of Health Communication Strategies.

Besides this, the table 34 also reflects that age and training under NHM did not make any difference in the overall use of Health Communication Strategies by the ASHAs. Therefore, null hypotheses were accepted.

Table 35

Analysis of Variance (ANOVA) showing variable wise differences in Overall Use of Health Communication Strategies **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-Value	*p*-Value	Remarks
Block	Between Groups	5898.6	5	1179.7			
	Within Groups	86180.6	320	269.3	4.4	0.001*	**Significant**
Educational Qualification	Between Groups	1008.3	3	336.1			
	Within Groups	91071.0	322	282.8	1.2	0.31	NS
Occupational Skills	Between Groups	3226.2	2	1613.1			
	Within Groups	88853.0	323	275.1	5.9	0.00*	**Significant**
Knowledge regarding HCS	Between Groups	1279.8	2	639.9			
	Within Groups	90799.5	323	281.1	2.3	0.10	NS
Media use	Between Groups	540.0	2	270.0			
	Within Groups	91539.2	323	283.4	1.0	0.39	NS

***p<0.05, NS – Not Significant**

The table 35 reveals that there was no significant difference in overall use of Health Communication Strategies by the ASHAs and their educational qualification, knowledge regarding Health Communication Strategies and their media use. Therefore, null hypotheses were accepted.

Whereas there was a significant difference in the overall use of Health Communication Strategies by the ASHAs and the block they represented and the occupational skills they possessed. Therefore, null hypotheses were not accepted and further analysis using Tukey's HSD was carried out.

Table 36

Tukey's HSD comparison for Overall Use of Health Communication Strategies with Block and Occupational Skill **n=326**

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig.
Block	Pavi Jetpur $\overline{x}$= 45.17	Chhotaudepur $\overline{x}$= 38.21	6.96090	2.92782	.167
		Sankheda $\overline{x}$=36.70	8.46967*	2.92782	.047
		Bodeli $\overline{x}$=32.90	12.27143*	3.03869	.001
		Nasvadi $\overline{x}$=39.05	6.12143	3.25272	.415
		Kavant $\overline{x}$=33.94	11.22912*	3.00441	.003
Occupational skill	Excellent $\overline{x}$= 41.33	Moderate $\overline{x}$=35.32	6.01241*	1.97251	.007
		Poor $\overline{x}$=34.26	7.06719*	2.91276	.042

***p<0.05**

It can be seen from the table 36 that the ASHAs belonging to Pavi Jetpur (45.17) had highly significant difference than their counterparts from Bodeli (32.90, p=0.001) and Kavant (32.94, p=0.003) and significant difference than Sankheda (36.70, p=0.047) for their overall use of Health Communication Strategies during

their selected work activities. It means that the mean overall use of ASHAs from Pavi Jetpur was significantly higher than Bodeli, Kavant and Sankheda.

Moreover, the ASHAs with excellent occupational skills reported highly significant overall use (41.33) than ASHAs with moderate (35.32, p=0.007) and significant difference than those ASHAs with poor occupational skills (34.26, p=0.042).

Thus, it can be said that the overall use of Health Communication Strategies by the ASHAs was influenced by their Work Experience, occupational skills and the block they belonged to. In present research five activities were considered for their work. Observed significant differences indicate that ASHAs with more Work Experience, possessing excellence occupational skills and belonging to Pavi Jetpur block found to use overall significantly more Health Communication Strategies. Therefore, it is suggested to organise more capacity building programmes for the ASHAs to sharpen their occupational skills. ASHAs with more Work Experience could be encouraged and promoted as peer group motivator/adviser for the ASHAs in her respective area. And ASHAs of Pavi Jetpur should be studied in detail. All these should be planned and implemented with special focus on Health Communication Strategies in all blocks.

The ASHAs performed their roles through the following five activities;

1. Home Visit
2. Planning and celebrating VHND (*Mamta* Day)
3. Visit health facilities
4. Village Health Sanitation and Nutrition Committee Meeting
5. Keeping and informing of records

In the following pages, ASHAs' activity-wise use of Health Communication Strategies is presented in detail.

4.5.1.1 Use of Health Communication Strategies by the ASHAs for Home Visit.

The table 37 reflects the frequency and percentage distribution of the ASHAs using various Health Communication Strategies for their Home visit to perform their duties.

Table 37

Distribution of the ASHAs according to Use of Health Communication Strategies for Home visit **n=326***

Use	f	%
A) Graphic/Print media		
Mamta card (Health card)	291	89.3
ASHA diary	272	83.4
Register	228	69.9
Chart/Poster	217	66.6
Leaflet	201	61.7
Information booklet	182	55.8
Flipbook	168	51.5
Banner	136	41.7
Flashcards	108	33.1
Wall painting	102	31.3
Sticker	68	20.9
Newspaper	54	16.6
Magazine	34	10.4
Hanging mobile	32	9.8
B) Electronic Media		
Mobile	184	56.4
CUG Sim card	157	48.2
Radio	35	10.7
Video film and Audio clip	42	12.9
TV	28	8.6
Smartphone	20	6.1
Internet	11	3.4
Audio clip	9	2.8
Application	5	1.5
C) Folk Media		
Folk songs	38	11.7
Street play	37	11.3
D) Other media		
Sample	72	22.1

***Multiple responses**

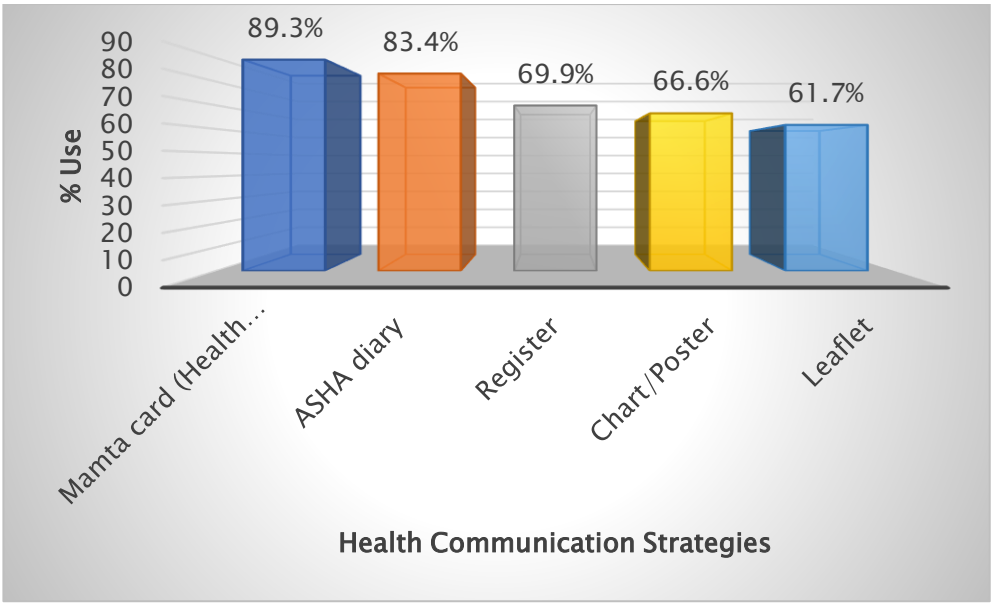
It was found that among graphic/print media, high majority *i.e.* 89.3 % and 83.4 % of the ASHAs use *Mamta* Card (Health card) and ASHA diary respectively. Least used were magazines (10.44%) and hanging mobiles (9.8%).

Further, table 37 shows that mobile phone (56.4%) and CUG sim card (48.2%) were used by a higher percentage of ASHAs during home visit.

Folk songs and street plays were used by a very few ASHAs (11.7% and 11.3%) for creating awareness or providing information during their home visit, also some of the ASHAs (22.1%) reported about their use of samples of like IUD, male condoms *etc.* for giving knowledge about contraception during a home visit to the beneficiaries.

Figure 30

Percentage Distribution of the ASHAs according to Top Five Health Communication Strategies used for Home Visit **n=326***



***Multiple responses**

The figure 30 clears that during a home visit, the ASHAs mostly used Health Communication Strategies include graphic media only. Among them, the highest used was *Mamta* card followed by ASHA Diary, Register, chart/poster and leaflet.

The probable reasons could be their availability and relevance to the majority of the Home visit in the area. The ASHA kit (*Mamta* card, ASHA diary and Registers) was provided to the ASHAs during their induction. Moreover, during a home visit their work related to counselling mother and family on nutrition, danger signs during ANC and PNC *etc.* would have been easily and effectively handled with these graphic media.

Table 38

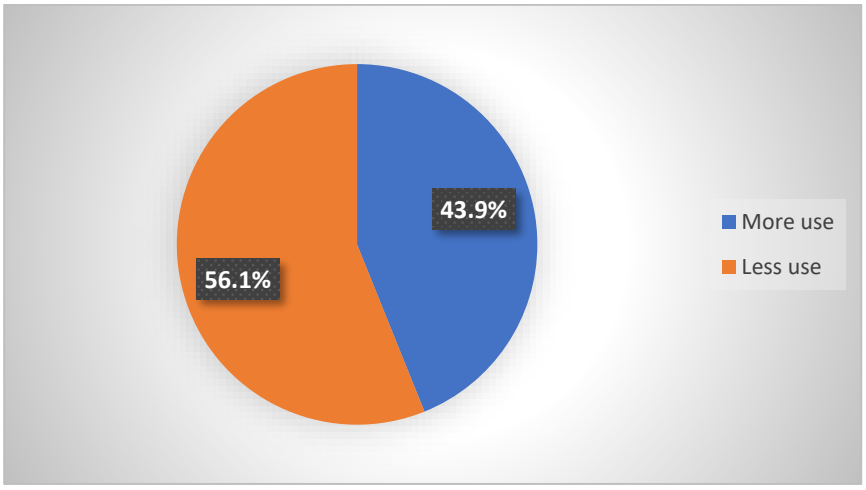
Categorisation of the ASHAs according to Use of Health Communication Strategies for Home Visit **n=326**

Use	f	%
More Use	143	43.9
Less Use	183	56.1

Table 38 and figure 31 reveal that higher percentages of the ASHAs (56.1%) used less number of media and their counterparts used comparatively more number of media during home visit.

Figure 31

Categorisation of the ASHAs according to Use of Health Communication Strategies for Home Visit **n=326**



Variable wise differences in 'Use of Health Communication Strategies for Home Visit

Table 39

t-test showing variable wise differences in Use of Health Communication Strategies for Home Visit **n=326**

Variable	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	8.58	4.59	0.07	0.946	NS
	Older	180	8.62	4.20	0.07		
Work Experience	Less Work Experience	116	7.96	4.10	2.01	0.045*	**Significant**
	More Work Experience	210	8.97	4.46	20.60		
Training	Partially Trained	34	7.7	4.1	1.2	0.234	NS
	Completely Trained	292	8.7	4.3	1.2		

***p<0.05, NS- Not Significant**

The above table 39 depicts that no significant differences were observed concerning age and training received under NHM by the ASHAs.

Therefore, null hypotheses stating that there will be no significant differences in the use of Health Communication Strategies during 'Home Visit' by the ASHAs about their age and training received under NHM were accepted. It means that the age and training of the ASHAs did not make any difference in their use of Health Communication Strategies during their home visit.

Whereas, significant differences were observed in the use of Health Communication Strategies during 'Home Visit' by the ASHAs according to their Work Experience as an ASHA. The mean score of ASHAs with more Work Experience was significantly higher than the ASHAs having less Work Experience. It means that ASHAs having more Work Experience, used more number of Health Communication Strategies than their counterparts.

With Work Experience, an individual learns a better way of service delivery, leads to gain in confidence too. In this context, the ASHAs having more Work Experience might have realised the benefits of using Health Communication Strategies while interacting and educating beneficiaries at their households. Therefore, it is proved that their use of Health Communication Skills was significantly higher than those having fewer years of Work Experience. ASHAs with more Work Experienced might have witnessed successful incidents of using Health Communication Strategies to foster behaviour change, on the other hand, their counterparts during shorter work span may have been hesitant, less confident and therefore there may exist significant difference.

Thus, the null hypothesis stating that there will be no significant difference in the use of Health Communication Strategies during 'Home Visit' by the ASHAs about their Work Experience was not accepted.

Table 40

Analysis of Variance (ANOVA) showing variable wise differences in Use of Health Communication Strategies for Home Visit **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-Value	*p*-Value	Remarks
Block	Between Groups	236.3	5	47.3	2.5	0.02*	**Significant**
	Within Groups	5944.7	318	18.7			
Educational Qualification	Between Groups	79.8	3	26.6	1.4	0.24	NS
	Within Groups	6101.2	320	19.1			
Occupational Skills	Between Groups	46.4	2	23.2	1.2	0.30	NS
	Within Groups	6134.6	321	19.1			
Knowledge regarding HCS	Between Groups	51.1	2	25.6	1.3	0.26	NS
	Within Groups	6129.9	321	19.1			
Media Use	Between Groups	0.1	2	0.0	0.0	1.00	NS
	Within Groups	6180.9	321	19.3			

***p<0.05, NS – Not Significant**

The table 40 reveals that there were no significant differences in the use of Health Communication Strategies during 'Home Visit' by the ASHAs according to their occupational skills, knowledge about Health Communication Strategies and Media use. Hence null hypotheses stating that there will be no significant differences in the

use of Health Communication Strategies during a home visit by the ASHAs for their educational qualification, occupational skills, knowledge regarding Health Communication Strategies and Media Use were accepted.

It is also seen that there were significant differences among the ASHAs belonging to a different block for their use of Health Communication Strategies during a Home visit. Therefore, the null hypothesis was not accepted.

Table 41

Tukey's HSD comparison for Use of Health Communication Strategies for Home Visit with Block **n=326**

Variable	Variable (I)	Variable (J)	Mean diff (I-J)	Std Error	Sig.
Block	Pavi Jetpur $\overline{x}$=10.9	Chhota Udepur $\overline{x}$=9.01	1.96817	.70937	.064
		Sankheda $\overline{x}$=9.56	1.42431	.70937	.340
		Bodeli $\overline{x}$=7.94	3.04571*	.73623	.001
		Nasvadi $\overline{x}$=8.10	2.88571*	.78808	.004
		Kavant $\overline{x}$=8.09	2.88956*	.72792	.001

***p<0.05**

It can be seen from the above table 41 that there was a significant mean difference among the selected blocks. The ASHAs belonging to Pavi Jetpur (10.9) had highly significant difference than their counterparts from Bodeli (7.94, p=0.001), Nasvadi (8.10, p=0.004) and Kavant (8.09, p=0.001) for their use of Health Communication Strategies during 'Home Visit'. It means that the mean use of ASHAs from Pavi Jetpur was significantly higher than Bodeli, Nasvadi and Kavant.

These data are in line with those found in Provision section, which leads to infer that more provision leads to more use of Health Communication Strategies for a Home visit.

The ASHAs are expected to visit the families living in her area, for two to three hours a day for at least four to five days a week. It is mainly for health promotion and preventive care. In case when any child below two years of age/ malnourished child/ pregnant woman, the ASHA should visit them for their counselling session, especially for new-born a series of seven visits are more required. (ASHA Programme Guideline,2008). For all these expected roles, the majority of the ASHAs' use of Health Communication Strategies was found to be less.

Moreover, their Work Experience and block marked significant differences in their use. ASHAs belonging to Pavi Jetpur having higher provision and more years of Work Experience and higher provision used more number of Health Communication Strategies than those belonging to Bodeli, Nasvadi, Kavant blocks and with fewer years of Work Experience. Highest used Health Communication Strategies were *Mamta* card and ASHA diary.

Government of Uttar Pradesh (2008) stressed the advantage of emphasising community-based approaches such as Home Visits in addition to mass media campaigns, is that it allows for direct BCC interaction at the time when it is most relevant to the family.

However, no significant differences were observed among the ASHAs from Pavi Jetpur with those from Chhotaudepur and Sankheda.

4.5.1.2 Use of Health Communication Strategies by the ASHAs for Village Health and Nutrition Day-VHND (*Mamta* day).

Table 42

Distribution of the ASHAs according to Use of Health Communication Strategies for VHND **n=326***

Use	f	%
A) Graphic/Print media		
Mamta card (Health card)	309	94.8
ASHA diary	296	90.8
Register	283	86.8
Chart/Poster	250	76.7
Banner	203	62.3
Information booklet	185	56.7
Wall painting	149	45.7
Flipbook	146	44.8
Leaflet	144	44.2
Flashcards	114	35.0
Sticker	99	30.4
Newspaper	54	16.6
Magazine	36	11.0
Hanging Mobile	32	9.8
B) Electronic Media		
Mobile	204	62.6
CUG sim card	138	42.3
Video film	26	8.0
TV	24	7.4
Smartphone	23	7.1
Laptop	19	5.8
Radio	18	5.5
PPT	15	4.6
Internet	11	3.4
Computer	9	2.8
Audio clip	8	2.5
Application	5	1.5
Community Radio	4	1.2

C) Folk Media		
Folk songs	43	13.2
Street play	38	11.7
Puppet show	16	4.9
D) Other media		
Sample	69	21.2

***Multiple responses**

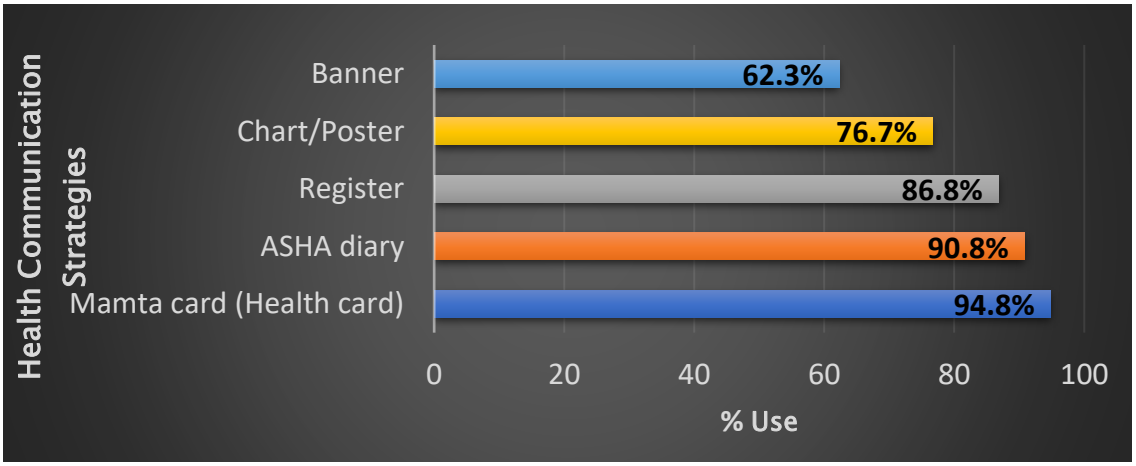
It can be read from table 42 that high majority of the ASHAs used *Mamta* card (health card) (94.8%), ASHA diary (90.8%) and register (86.8%) followed by charts/posters (76.7%) and banners (62.3%) during planning and celebration of *Mamta* day *i.e.* Village Health and Nutrition Day (VHND).

Further, table 42 reveals that majority (62.6%) of the ASHAs used mobile phones for coordination and calling beneficiaries at the VHND and least used were Mobile based Application (1.5%) and Community radio (1.2%).

A few of the ASHAs mentioned about use of folk songs (13.2%), Street play (11.7%) and Puppet show (4.9%) on *Mamta* Day, which may be planned on the day to create awareness about social determinants of health and other important messages.

Figure 32

Percentage Distribution of the ASHAs according to Top Five Health Communication Strategies used for VHND **n=326***



***Multiple responses**

It can be seen from the figure 32 that mostly used five Health Communication Strategies by the ASHAs, include graphic media only. VHND is a monthly mass mobilisation event for which banner and chart/posters give visibility and help in explaining concepts related to health to the participants. On this day benefits like immunisation, contraception and stock of nutrition supplements are also distributed therefore, registers, ASHA diary and *Mamta* card would help them in record keeping.

Table 43

Categorisation of the ASHAs according to Use of Health Communication Strategies for VHND ***n=326***

Use	f	%
More Use	168	51.5
Less Use	158	48.5

Table 43 and figure 33 reveal that higher percentage of the ASHAs (51.5%) used more number of media and their counterparts who used comparatively less number of media during planning and celebration of *Mamta* day *i.e.* Village Health and Nutrition Day (VHND).

Figure 33

Categorisation of the ASHAs according to Use of Health Communication Strategies for VHND **n=326**

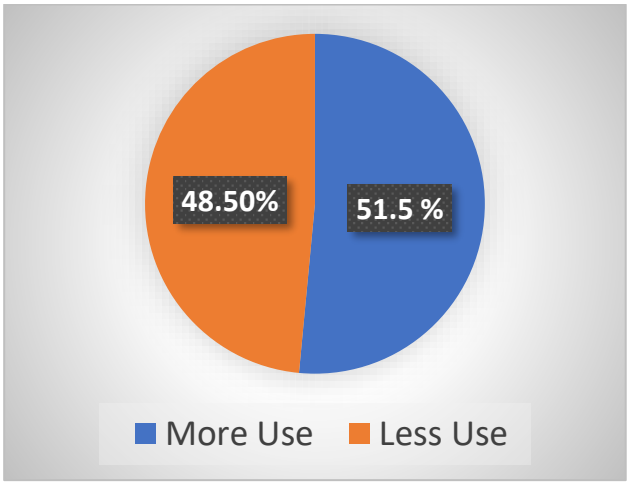


Table 44

t-test showing variable wise differences in Use of Health Communication Strategies for VHND **n=326**

Variables	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	8.98	4.25	0.518	0.605	NS
	Older	180	9.22	3.99	0.515		
Work Experience	Less Work Experience	116	8.50	3.96	2.00	0.046*	**Significant**
	More Work Experience	210	9.45	4.15	2.00		
Training	Partially Trained	34	8.0	4.0	1.63	0.105	NS
	Completely Trained	292	9.2	4.1	1.66		

***p<0.05, NS – Not Significant**

The above table 44 depicts that no significant differences in the use of Health Communication Strategies during 'Planning and Celebrating VHND' were found with respect to age and training received under NHM by the ASHAs.

Therefore, null hypothesis stating that there will be no significant difference in the use of Health Communication Strategies during 'Planning and Celebrating VHND' by the ASHAs with their age and training received under NHM were accepted.

However, significant differences in the use of Health Communication Strategies during 'Planning and Celebrating VHND' were observed among the ASHAs according to their years of Work Experience as an ASHA. The mean score of use of

Health Communication Strategies by the ASHAs with more Work Experience was significantly higher than the ASHAs having less Work Experience. It means that ASHAs having more Work Experience use more number of Health Communication Strategies than their counterparts. This may be attributed to that the Work Experienced ASHAs may know the advantages of using Health Communication Strategies during village Health and Nutrition Day–*Mamta* Day and therefore successfully grab the opportunities to use them. On the other hand, less Work Experienced ASHAs may be ignorant, have an indifferent attitude or may not get enough opportunities to use Health Communication Strategies.

Thus, the null hypothesis stating that there will be no significant difference in the use of Health Communication Strategies during 'Planning and Celebrating VHND' by the ASHAs about their Work Experience was not accepted.

Table 45

Analysis of Variance (ANOVA) showing variable wise differences in Use of Health Communication Strategies for VNHD **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-Value	*p*-Value	Remarks
Block	Between Groups	421.1	5	84.2			
	Within Groups	5058.9	320	15.8	5.3	0.000*	**Significant**
Educational Qualification	Between Groups	9.5	3	3.2			
	Within Groups	5470.5	322	17.0	0.2	0.91	NS
Occupational Skills	Between Groups	111.7	2	55.8			
	Within Groups	5368.3	323	16.6	3.4	0.036*	**Significant**
Knowledge regarding HCS	Between Groups	63.4	2	31.7			
	Within Groups	5416.6	323	16.8	1.9	0.153	NS
Media Use	Between Groups	48.3	2	24.2			
	Within Groups	5431.7	323	16.8	1.4	0.239	NS

***p<0.05, NS – Not Significant**

Table 45 depicts that there were no significant differences in the use of Health Communication Strategies during 'Planning and Celebrating VHND' by the ASHAs

according to their educational qualification, knowledge regarding Health Communication Strategies and Media use.

It can be derived that education level, knowledge about Health Communication Strategies and personal level media use have not marked influence on ASHAs' use of Health Communication Strategies during village level Health Day.

Therefore, null hypotheses stating that there will be no significant differences in the use of Health Communication Strategies during 'Planning and Celebrating VHND' by the ASHAs in relation to their educational qualification, knowledge regarding Health Communication Strategies and Media use were accepted.

Whereas significant differences were found in the use of Health Communication Strategies during 'Planning and Celebrating VHND' by the ASHAs according to their blocks and occupational skills. Hence, null hypotheses were not accepted for these two variables under study. Therefore, further analysis was done using Tukey's HSD comparison.

Table 46

Tukey's HSD comparison for Use of Health Communication Strategies for VHND with Block and Occupational skills **n=326**

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig.
Block	Pavi Jetpur $\overline{x}$=10.98	Chhota Udepur $\overline{x}$=9.01	1.96817	.70937	.064
		Sankheda $\overline{x}$=9.56	1.42431	.70937	.340
		Bodeli $\overline{x}$=7.94	3.04571*	.73623	.001
		Nasvadi $\overline{x}$=8.1	2.88571*	.78808	.004
		Kavant $\overline{x}$=8.09	2.88956*	.72792	.001
Occupational Skill	Excellent $\overline{x}$= 9.69	Moderate $\overline{x}$= 8.71	.98139	.48485	.108
		Poor $\overline{x}$= 8.14	1.55043	.71596	.079
	Moderate $\overline{x}$= 8.71	Excellent $\overline{x}$= 9.69	-.98139	.48485	.108
		Poor $\overline{x}$= 8.14	.56904	.73022	.716
	Poor $\overline{x}$= 8.14	Excellent $\overline{x}$= 9.69	-1.55043	.71596	.079
		Moderate $\overline{x}$= 8.71	-.56904	.73022	.716

***p<0.05**

It can be seen from the above table 46 that there was a significant mean difference among the selected categories. The ASHAs belonging to Bodeli (7.94, p=0.001), Nasvadi (8.1, p=0.004) and Kavant (8.09, p=0.001) had highly significant difference than their counterparts from Pavi Jetpur (10.98) for their use of Health Communication Strategies. It means that the mean use of Health Communication Stratgies during the planning and celebrating Village Health and Nutrition Day by ASHAs from Pavi Jetpur was significantly higher than Bodeli, Nasvadi and Kavant.

However, no significant differences were observed among the ASHAs from Pavi Jetpur with those belonging to Chhotaudepur (9.01, p=0.064) and Sankheda (9.56, p=0.340) blocks respectively. Apart from this, no significant differences were observed in the mean scores of ASHAs for their selected categories of occupational skills.

The probable reasons could be many for more use in Pavi Jetpur block by the ASHAs, it may be that they had more Work Experience, may have better provision, may be more enthusiastic, may have more opportunities, having better support from Anganwadi worker and FHW *etc.*

Village Health and Nutrition Day is a monthly activity, organised at Anganwadi in each village. FHW comes to provide antenatal care, immunisation and other services and AWW extend benefits to women, children and adolescents.

The role of an ASHA is to plan, coordinate with ANM and AWW as well as promote attendance of beneficiaries at the *Mamta* Day. Moreover, she assists in the service delivery process to FHW and AWW. (MoHFW, GoI, District Level functionaries Manual 2007). It is assumed that all these roles can be performed effectively with the use of appropriate communication strategies.

However, the ASHAs were almost equally divided concerning their use of Health Communication Strategies in more or fewer numbers, which is not an encouraging trend. Ideally, they should encash this opportunity for monitoring health care information and promoting messages using multiple channels of communication for targeted behaviour change.

4.5.1.3 Use of Health Communication Strategies by the ASHAs for Visit to Health Facilities.

Table 47

Distribution of the ASHAs according to Use of Health Communication Strategies for Visit to Health Facilities **n=326***

Use	f	%
A) Graphic/Print media		
ASHA Diary	270	82.8
Register	256	78.5
Mamta card (Health card)	240	73.6
Chart/Poster	224	68.7
Leaflet	162	49.7
Banner	147	45.1
Information booklet	138	42.3
Wall-painting	133	40.8
Flipbook	102	31.3
Flashcard	84	25.8
Sticker	71	21.8
Newspaper	62	19.0
Magazine	26	8.0
Hanging Mobile	26	8.0
B) Electronic Media		
Mobile	243	74.5
CUG sim card	142	43.6
Video film	42	12.9
TV	28	8.6
PPT	17	5.2
Laptop	14	4.3

Smartphone	11	3.4
Internet	11	3.4
Computer	10	3.1
Audio clip	5	1.5
Application	3	0.9
C) Folk Media		
Folk songs	33	10.1
D) Other media		
Sample	43	13.2

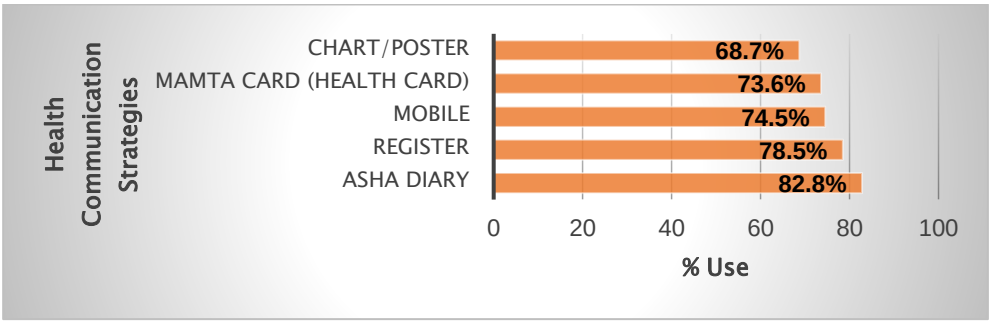
***Multiple responses**

From the above table 47, it can be derived that among graphic/print media, high majority *i.e.* 82.8 %, 78.5 % and 73.6 % of the ASHAs used ASHA diary, register and *Mamta* Card (Health card) respectively. Least used were magazines and hanging mobiles by the same 8.0 per cent of the ASHAs.

Further, table 47 reflects that majority of the ASHAs used a mobile phone (74.5%) and least used in the category is an application on TeCHO mobiles *i.e.* 0.9 %. During their visit to Health facilities, few of the ASHAs (13.2%) used samples like IUD, male condoms *etc.*

Figure 34

Percentage Distribution of the ASHAs according to Top Five Health Communication Strategies used for Visit to Health Facilities **n=326***



***Multiple responses**

The figure 34 highlights the top five highly used Health Communication Strategies. The highest use was Chart/poster at the facilities followed by *Mamta* card which is a health record card. The third media is a Mobile phone, which might have helped the ASHAs to coordinate and arrange for the vehicle, an appointment with a doctor at the hospital and also to stay connected with patient's family and her own family during her visit to the health facilities.

Besides these, ASHAs found to use Register and ASHA diary both serving the purpose of record and stock maintenance and later for graphical explanation to the beneficiaries.

Table 48

Categorisation of the ASHAs according to Use of Health Communication Strategies for Visit to Health Facilities **n=326**

Use	f	%
More Use	118	36.2
Less Use	208	63.8

Table 15 and figure revel that higher per cent of the ASHAs (63.8%) used less number of media whereas their counterparts (36.2%) used more number of Health Communication Strategies for coordinating their visit to Health Facilities.

Figure 35

Categorisation of the ASHAs according to Use of Health Communication Strategies for Visit to Health Facilities **n=326**

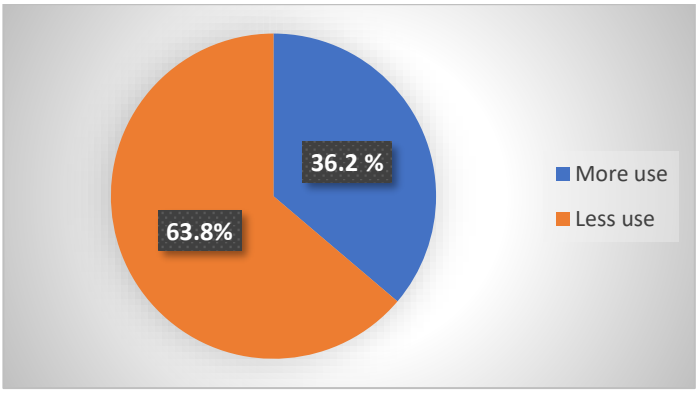


Table 49

t-test showing variable wise differences in Use of Health Communication Strategies during Visit to Health Facilities **n=326**

Variable	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	8.27	4.68	1.293	0.197	NS
	Older	180	7.64	4.01	1.273		
Work Experience	Less Work Experience	116	7.68	4.44	0.751	0.453	NS
	More Work Experience	210	8.06	4.27	0.742		
Training	Partially Trained	34	7.9	4.4	0.016	0.987	NS
	Completely Trained	292	7.9	4.3	0.016		

***p<0.05, NS – Not Significant**

It can be seen from the above table 49 that no significant differences in the use of Health Communication Strategies for arranging or during 'Visit to Health facilities' were found with respect to age, Work Experience and training received under NHM by the ASHAs.

Therefore, null hypothesis stating that there will be no significant difference in the use of Health Communication Strategies for 'Visit to Health facilities' by the ASHAs in relation to their age, Work Experience and training received under NHM were accepted.

Table 50

Analysis of Variance (ANOVA) showing variable wise differences in Use of Health Communication Strategies for Visit to Health Facilities **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-Value	*p*-Value	Remarks
Block	Between Groups	350.0	5	70.0	3.9	0.002*	**Significant**
	Within Groups	5739.1	320	17.9			
Educational Qualification	Between Groups	25.0	3	8.3	0.4	0.72	NS
	Within Groups	6064.1	322	18.8			
Occupational Skills	Between Groups	71.3	2	35.6	1.9	0.149	NS
	Within Groups	6017.8	323	18.6			
Knowledge regarding HCS	Between Groups	129.4	2	64.7	3.5	0.031*	**Significant**
	Within Groups	5959.7	323	18.5			
Media Use	Between Groups	11.1	2	5.6	0.3	0.744	NS
	Within Groups	6077.9	323	18.8			

***p<0.05, NS – Not Significant**

Table 50 reveals that no significant differences were found in the use of Health Communication Strategies for 'visit to health facilities' by the ASHAs according to their educational qualification, occupational skills and Media use.

Thus, null hypotheses stating that there will be no significant differences in the use of Health Communication Strategies for 'visit to health facilities' by the ASHAs in relation to their educational qualification, occupational skills and Media use were accepted.

The further table 50 also depicts that significant differences were observed in ASHAs for their use of Health Communication Strategies for 'Visit to Health facilities' for their blocks and knowledge regarding Health Communication Strategies.

Therefore, null hypotheses stating that there will be no significant differences in the use of Health Communication Strategies for 'Visit to Health facilities' by the ASHAs in relation to their blocks and knowledge regarding Health Communication Strategies were not accepted. In the following page, post hoc table about significant differences amongst the categories of variables was checked.

Table 51

Tukey's HSD comparison for Use of Health Communication Strategies for Visit to Health Facilities with Block and Knowledge level **n=326**

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig.
Block	Pavi Jetpur $\overline{x}$=9.4	Chhota Udepur $\overline{x}$=8.40	1.03935	.75555	.742
		Sankheda $\overline{x}$=6.84	2.60075**	.75555	.009
		Bodeli $\overline{x}$=6.52	2.92286**	.78416	.003
		Nasvadi $\overline{x}$=7.52	1.91786	.83939	.203
		Kavant $\overline{x}$=8.19	1.25055	.77531	.591
Knowledge regarding HCS	Med knowledge $\overline{x}$=8.40	Low Knowledge $\overline{x}$=7.92	.47692	.67421	.759
		High knowledge $\overline{x}$=6.93	1.46742*	.55412	.023

***p<0.05, NS – Not Significant**

The table 51 shows that there were significant mean differences between the selected categories. The mean scores of ASHAs belonging to Bodeli (6.52, p=0.003) and Sankheda (6.84, p=0.009) had highly significant difference than their counterparts from Pavi Jetpur (9.4) for their use of Health Communication Strategies during 'Visit to Health Facilities'. It means that the use of Health Communication Strategies by ASHAs from Pavi Jetpur was significantly higher than Sankheda and Bodeli.

However, no significant differences were observed among the ASHAs from Pavi Jetpur with those belonging to Chhotaudepur (8.40), Nasvadi (7.52) and Kavant (8.19) blocks respectively.

Also, there were significant differences observed in the mean scores of ASHAs for their knowledge regarding Health Communication Strategies. The ASHAs with medium knowledge (8.40) had significantly more use than ASHAs with High Knowledge (6.93, p=0.023). This implies that ASHAs with medium knowledge about Health Communication Strategies used more number of Health Communication Strategies than the ASHAs with high knowledge about them. It also means that the ASHAs with medium knowledge needed more ways to communicate and deal with beneficiaries and doctors as compared to the ASHAs with higher knowledge about Health Communication Strategies.

The ASHAs visited to the health facility for certain reasons; one was to accompany pregnant woman or some patient who needed her services for escort. It was also to attend a training programme and weekly review meeting.

During their visit as an escort, she might call and arrange for an appointment, be present during consultation also can show and explain about messages referring to displayed and take-home IEC materials at the health facilities. Training and review meetings were more to strengthen the grass-root level of health functionaries. It was reported that during the review meeting SATCOM programs were watched by all the

staff and health care workers at PHC. Besides this, the stock of medicine and other supply was provided on the same day.

The data revealed that all the above work is managed with less number of Health Communication Strategies by the majority of the ASHAs in the Chhotaudepur District.

4.5.1.4 Use of Health Communication Strategies by the ASHAs for Village Health Sanitation and Nutrition Committee Meeting.

Table 52

Distribution of selected ASHAs according to Use of Health Communication Strategies for Village Health Sanitation and Nutrition Committee Meeting **n=326***

Use	f	%
A) Graphic/Print media		
Register	280	85.9
ASHA Diary	219	67.2
Chart/Poster	186	57.1
Mamta card	154	47.2
Leaflet	143	43.9
Information booklet	137	42.0
Banner	136	41.7
Wall painting	94	28.8
Flipbook	79	24.2
Flashcards	62	19.0
Sticker	54	16.6
Newspaper	35	10.7
Magazine	18	5.5
Hanging Mobile	13	4.0
B) Electronic Media		
Mobile	230	70.6
CUG sim card	122	37.4
Video film	27	8.3
Smartphone	14	4.3
TV	13	4.0
Radio	9	2.8

C) Folk Media		
Folk songs	33	10.1
Street play	31	9.5
D) Other media		
Sample	36	11.00

***Multiple responses**

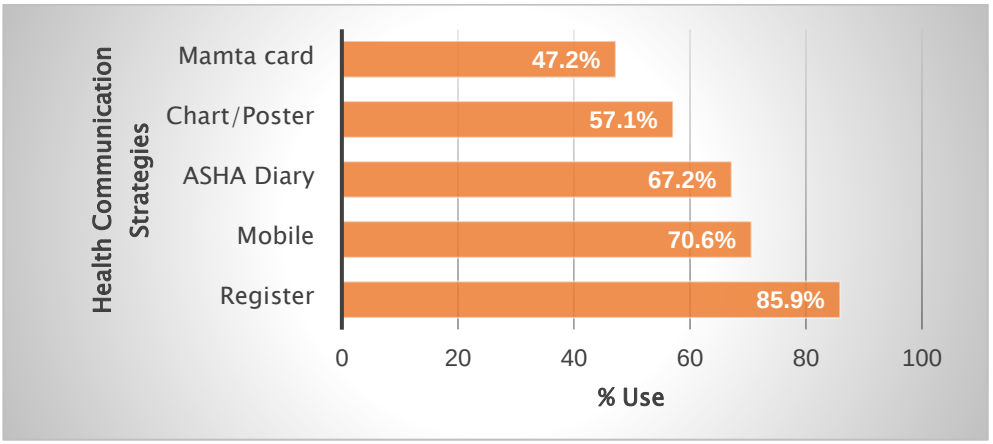
From the table 52, it can be seen that among graphic/print media, the high majority of the ASHAs use register (85.9%) and ASHA diary (67.2%) followed by Chart/poster used by 57.1 % of the ASHAs.

Further, among electronic media, table 52 reflects that majority of the ASHAs use a mobile phone (70.6%) and least used in the category was radio *i.e.* 2.8 % , which was provided under NHM to members of Village Health and Sanitation Committee.

Figure 36

Percentage Distribution of the ASHAs according to Top Five Health Communication Strategies used for Village Health Sanitation and Nutrition Committee Meeting

n=326*



***Multiple responses**

The figure 36 shows that the ASHAs as the Secretary, used mostly Registers, ASHA diary, chart/poster followed by *Mamta* card for the Village Health Sanitation and Nutrition Committee (VHSNC). Their higher and frequent use of Mobile phone

signifies that for the coordination and convening the meeting the ASHAs would have used them.

Table 53

Categorisation of the ASHAs according to Use of Health Communication Strategies for Village Health Sanitation and Nutrition Committee Meeting **n=326**

Use	f	%
More Use	124	38.0
Less Use	202	62.0

Figure 37

Categorisation of the ASHAs according to Use of Health Communication Strategies for Village Health Sanitation and Nutrition Committee Meeting **n=326**

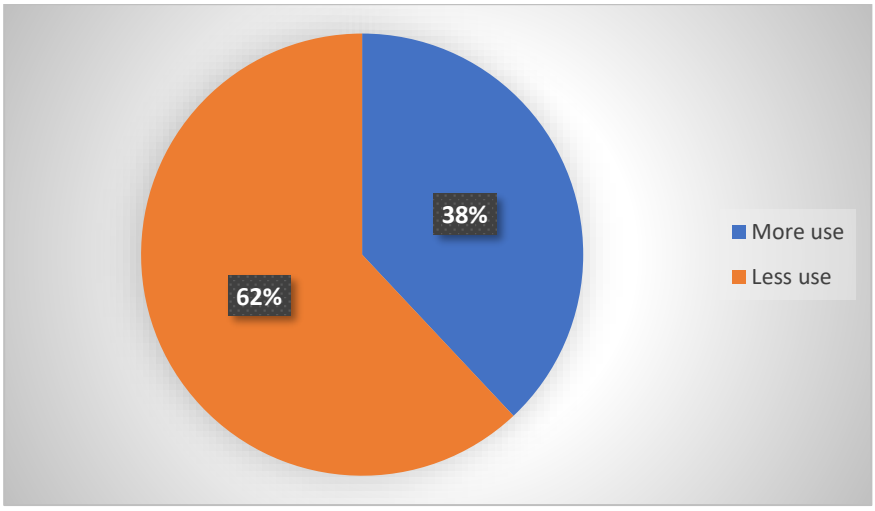


Table 53 and figure 37 reveal that higher percentages of the ASHAs (62.0%) used less number of media whereas their remaining (38.0%) ASHAs used comparatively more number of media during Village Health Plan meeting conducted once in a month.

Table 54

t-test showing variable wise differences in Use of Health Communication Strategies for Village Health Sanitation and Nutrition Committee Meeting **n=326**

Variable	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	6.6	4.6	0.427	0.67	NS
	Older	180	6.8	4.4	0.426		
Work Experience	Less Work Experience	116	5.60	4.10	3.120	0.002*	**Significant**
	More Work Experience	210	7.20	4.50	0.212		
Training	Partially Trained	34	5.2	3.4	2.000	0.046*	**Significant**
	Completely Trained	292	6.8	4.6	2.540		

***p<0.05, NS- Not Significant**

The table 54 depicts that no significant difference in the use of Health Communication Strategies for 'VHSC meeting' was found as per their age by the ASHAs. Therefore, the null hypothesis stating that there will be no significant difference in the use of Health Communication Strategies for 'VHSC meeting' by the ASHAs in relation to their age was accepted.

However, ASHAs deferred in their use of Health Communication Strategies as per their Work Experience and training received under NHM. The mean score of ASHAs with more Work Experience and those having complete training found to be significantly high as compared to their counterparts. This means that ASHAs with more Work Experience and having completed their training used more Health Communication Strategies for 'VHSC meeting'.

Having more Work Experience, the individual understands the dynamics of a group and their responsibilities. They know how to handle difficult situations during the planning meeting. Since they have handled more such meetings, they understand the group dynamics and requirements of their village.

Therefore, ASHAs may be using more Health Communication Strategies for convening and documenting Village Health Sanitation and Nutrition Committee Meetings, as a member secretary of VHSNC.

Addition to this, 'training' was also found significant with regards to the use of Health Communication Strategies by the ASHAs. This may be as completely trained ASHAs have undergone more rigorous training, wherein their skills of using Health Communication Strategies during village health sanitation committee got sharpened. Such capacity-building programmes provide exposure and training which equip the ASHAs, therefore completely trained ASHAs used a significantly higher number of Health Communication Strategies than their counterparts.

Hence, Null hypotheses stating that there will be no significant differences in the use of Health Communication Strategies for ‘VHSNC meeting' by the ASHAs with their Work Experience and training received under NHM were not accepted.

Table 55

Analysis of Variance (ANOVA) showing variable wise differences in Use of Health Communication Strategies for Village Health Sanitation and Nutrition Committee Meeting **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-Value	*p*-Value	Remarks
Block	Between Groups	556.1	5	111.2	6.3	0.000**	**Significant**
	Within Groups	5436.8	308	17.7			
Educational Qualification	Between Groups	41.5	3	13.8	0.7	0.54	NS
	Within Groups	5951.4	310	19.2			
Occupational Skills	Between Groups	425.0	2	212.5	11.9	0.000*	**Significant**
	Within Groups	5567.8	311	17.9			
Knowledge regarding HCS	Between Groups	47.9	2	24.0	1.3	0.287	NS
	Within Groups	5944.9	311	19.1			
Media use	Between Groups	45.9	2	23.0	1.2	0.302	NS
	Within Groups	5946.9	311	19.1			

***p<0.05, NS- Not Significant**

Table 55 depicts that significant differences were observed in ASHAs according to their block and occupational skills in the use of Health Communication Strategies for 'VHSNC meeting'.

Therefore, null hypotheses stating that there will be no significant differences in the use of Health Communication Strategies for 'VHSNC meeting' by the ASHAs in relation to their block and occupational skills Health Communication Strategies were not accepted.

However, no significant differences in the use of Health Communication Strategies for 'VHSNC meeting' by the ASHAs according to their education, knowledge regarding Health Communication Strategies and Media use were observed, hence corresponding Null hypotheses were accepted.

Table 56

Tukey's HSD comparison for Use of Health Communication Strategies for Village Health Sanitation and Nutrition Committee Meeting with Block and Occupational Skill

n=326

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig.
Block	Pavi Jetpur $\overline{x}$=8.84	Chhota Udepur $\overline{x}$=6.5	2.33409*	.77017	.031
		Sankheda $\overline{x}$=5.5	3.29900*	.77017	.000
		Bodeli $\overline{x}$=6.12	2.72286*	.79933	.010
		Nasvadi $\overline{x}$=7.80	1.04286	.85564	.827
		Kavant $\overline{x}$=5.13	3.70824*	.79032	.000
Occupational Skill	Excellent $\overline{x}$=7.79	Moderate $\overline{x}$=5.76	2.03201*	.52170	.000
		Poor $\overline{x}$=5.70	2.08623*	.77038	.019

***p<0.05**

It is depicted from the table 56 that there were significant differences in the mean scores of the selected categories. The mean scores of ASHAs belonging to Chhotaudepur (6.5, p=0.031) and Bodeli (6.12, p=0.010), had significant differences and Sankheda (5.5, p=0.000) and Kavant (5.13, p=0.000) had highly significant difference than their counterparts from Pavi Jetpur (8.84) for their use of Health Communication Strategies during 'Village Health and Sanitation Committee Meeting'.

It means that the ASHAs from Pavi Jetpur used a highly significant number of Health Communication Strategies than Sankheda, Kavant, Chhotaudepur and Bodeli.

However, no significant differences were observed among the ASHAs from Pavi Jetpur with those belonging to Nasvadi.

Moreover, there were significant differences observed in the mean scores of ASHAs with respect to their occupational skills. The ASHAs having excellent occupational skills had significantly higher mean score than their counterparts *i.e.* ASHAs with moderate and poor occupational skills. It means that ASHAs possessing a high level of occupational skills used more number of Health Communication Strategies for and during the meetings of Village Health Plan.

The ASHAs have been equipped with five essential soft skills; termed together as occupational skills; *i.e.* leadership, negotiation, communication, decision making and coordination. Here, their occupational skills may have affected their use of Health Communication Strategies during VHSC meeting, where major issues related to health and sanitation are discussed and decisions are taken. For this job, the ASHAs with excellent occupational skills used high significantly more Health Communication Strategies than their counterparts possessing moderate; whereas ASHAs with poor occupational skills differed significantly.

Village Health Sanitation and Nutrition Committee (VHSNC) is an important component of the National Health Mission for community processes and group approaches. The ASHAs are envisaged as a secretary of their village's VHSNC. They are responsible to convene and to document minutes of meetings done every month.

During this activity, the ASHA is expected to perform her role as a link worker between the VHSNC and villagers; also, she has worked as an activist while giving voice to villager's issues related to health and sanitation. Sanitation, nutrition and better living conditions are important determinants of health. With the appropriate and effective selection of Health Communication Strategies, she can perform her duties well.

The data of present research inferred that ASHAs belonging to Pavi Jetpur, having more Work Experience, complete training and possessing excellent occupational skills used a higher number of Health Communication Strategies than their counterparts.

4.4.1.5 Use of Health Communication Strategies by the ASHAs for Keeping and Informing about Records.

Table 57

Distribution of the ASHAs according to Use of Health Communication Strategies for Keeping and Informing about Records **n=326***

Use	f	%
A) Graphic/Print media		
Register	298	91.4
ASHA Diary	289	88.7
Mamta card	183	56.1
Information booklet	105	32.2
B) Electronic Media		
Mobile	266	81.6
CUG sim card	128	39.3
Smartphone	12	3.7
Laptop	12	3.7
Computer	9	2.8
Application	7	2.1
Internet	4	1.2

***Multiple responses**

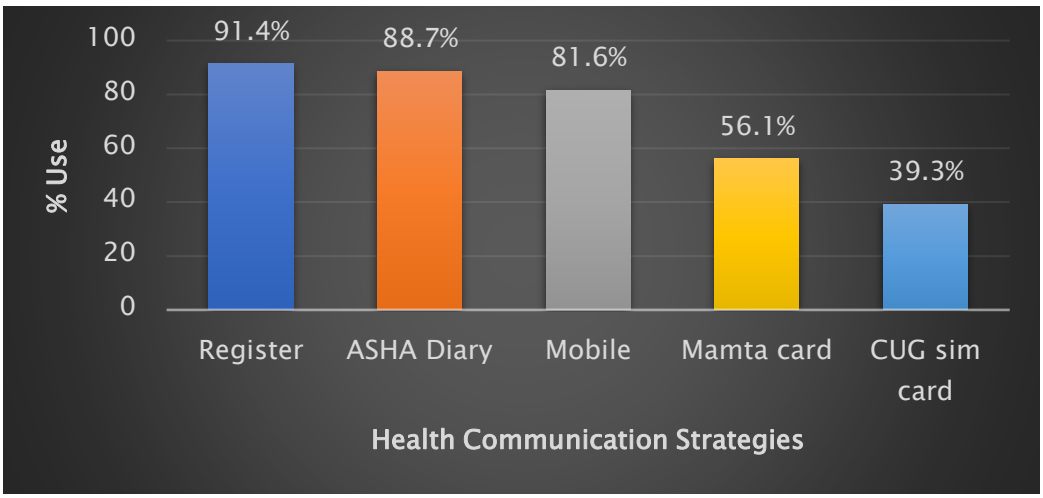
It can be seen from the table 57 that a high majority of the ASHAs used registers (91.4%) and ASHA diary (88.9%). Fifty-six per cent of the ASHAs use *Mamta* card and 32.2 % of the ASHAs used information booklet for keeping and informing about records.

Amongst the electronic media 81.6 % of the ASHAs used mobile phones and 39.3 % used CUG sim cards for providing and receiving information from patients and authorities. For maintaining record in a mobile phone, they may have referred to recent smart mobile phone and application available with FHWs. Very few of the ASHAs used following media for the record-keeping/ making:

- Smartphone (3.7%)
- Laptop (3.7%)
- Computer (2.8%)
- Application (2.1%)
- Internet (1.2%)

Figure 38

Percentage Distribution of ASHAs according to Top Five Health Communication Strategies Used for Keeping and Informing about Records **n=326***



***Multiple responses**

The figure 38 suggests that graphic and print media like registers, ASHA diary and *Mamta* Cards were mostly used as they might have helped for proper record keeping. These consist of ASHA kit, which provided by the health department.

Further, the ASHAs used mobile and CUG card for informing the birth-death data, the spread of the epidemic and in case of emergency.

Table 58

Categorisation of the ASHAs according to Use of Health Communication Strategies for Keeping and Informing about Records **n=326**

Use	f	%
More Use	121	37.1
Less Use	205	62.9

It is clear from the table 58 and figure 39 that the majority (62.9%) of the ASHAs used less number of Health Communication strategies than their counterparts (37.1%) who used more number of Health Communication Strategies.

Figure 39

Categorisation of the ASHAs according to Use of Health Communication Strategies for Keeping and Informing about Records **n=326**

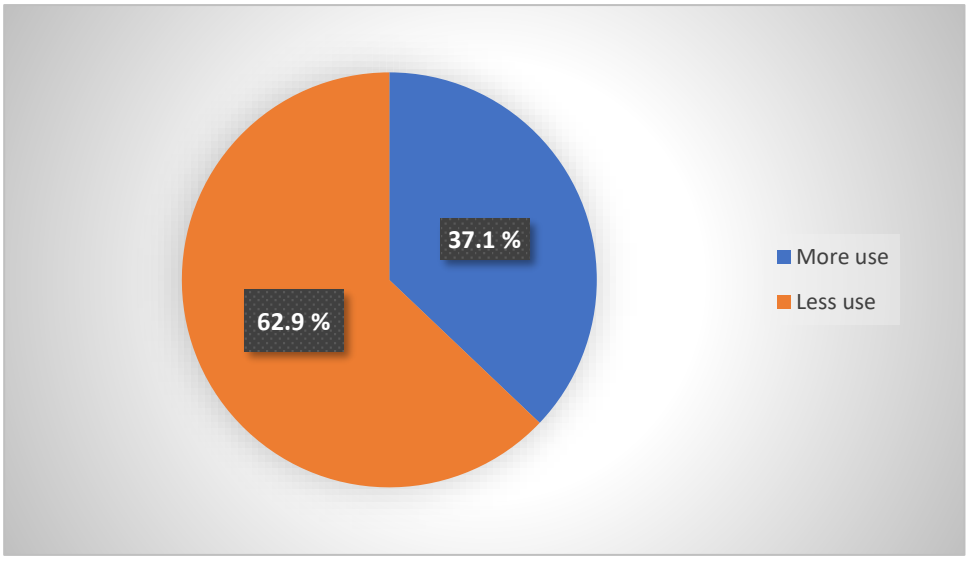


Table 59

t-test showing variable wise differences in Use of Health Communication Strategies for Keeping and Informing about Records **n=326**

Variable	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	5.86	4.24	0.752	0.453	NS
	Older	180	5.53	3.70	0.741		
Work Experience	Less Work Experience	116	5.31	3.71	1.280	0.201	NS
	More Work Experience	210	5.89	4.06	1.310		
Training	Partially Trained	34	5.3	3.9	0.658	0.511	NS
	Completely Trained	292	5.8	3.9	0.662		

***p<0.05, NS- Not Significant**

Table 59 depicts that no significant differences in the use of Health Communication Strategies for 'Keeping and informing about records' were observed as per their age, Work Experience and training received under NHM by the ASHAs.

Therefore, null hypotheses stating that there will be no significant differences in the use of Health Communication Strategies for 'Keeping and informing about records' by the ASHAs in relation to their age, Work Experience and training received under NHM were accepted.

Table 60

Analysis of Variance (ANOVA) showing variable wise differences in Use of Health Communication Strategies for Keeping and Informing about Records **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F – Value	*p*– Value	Remarks
Block	Between Groups	367.3	5	73.5	5.0	0.000*	**Significant**
	Within Groups	4641.7	318	14.6			
Educational Qualification	Between Groups	78.7	3	26.2	1.7	0.17	NS
	Within Groups	4930.3	320	15.4			
Occupational Skills	Between Groups	195.3	2	97.7	6.5	0.002*	**Significant**
	Within Groups	4813.7	321	15.0			
Knowledge regarding HCS	Between Groups	74.6	2	37.3	2.4	0.090	NS
	Within Groups	4934.4	321	15.4			
Media Use	Between Groups	27.6	2	13.8	0.9	0.412	NS
	Within Groups	4981.4	321	15.5			

***p<0.05, NS- Not Significant**

Table 60 depicts that significant differences were observed in ASHAs according to their blocks and occupational skills in the use of Health Communication Strategies for 'Keeping and informing about records'.

Those having excellent occupational skills might have been benefited with the use of various Health Communication Strategies for keeping and informing about health data. Therefore, they may be motivated to use them more for this purpose than those with a moderate level of occupational skills.

Therefore, null hypotheses stating that there will be no significant differences in the use of Health Communication Strategies for 'Keeping and informing about

records' by the ASHAs in relation to their blocks and occupational skills Health Communication Strategies were not accepted.

However, no significant differences in the use of Health Communication Strategies for 'Keeping and informing about records' by the ASHAs according to their education, knowledge regarding Health Communication Strategies and Media use were observed.

Thus, null hypotheses stating that there will be no significant differences in the use of Health Communication Strategies for 'Keeping and informing about records' by the ASHAs in relation to their education, knowledge regarding Health Communication Strategies and Media use were accepted.

Table 61

Tukey's HSD comparison for Keeping and Informing about Records with Block and Occupational Skill **n=326**

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig.
Block	Nasvadi $\overline{x}$=7.95	Chhota Udepur $\overline{x}$=4.92	3.02018*	.79064	.002
		Sankheda $\overline{x}$=5.85	2.09035	.79064	.090
		Bodeli $\overline{x}$=5.00	2.95000*	.81314	.004
		Pavi Jetpur $\overline{x}$=6.30	1.65000	.75976	.254
		Kavant $\overline{x}$=4.42	3.52692*	.80616	.000
Occupational Skill	Excellent $\overline{x}$=6.48	Moderate $\overline{x}$=4.89	1.59156*	.46244	.002
		Poor $\overline{x}$=5.19	1.28875	.68287	.144

***p<0.05**

It is depicted from the table 61 that there were significant differences in the mean scores of the selected categories of the ASHAs for their use of Health

Communication Strategies for 'Keeping and informing about records'. Tukey's HSD comparison shows that there were highly significant differences in the mean scores of the ASHAs belonging to Nasvadi (7.95) and those from Chhotaudepur (4.92, p=0.002), Bodeli (5.00, p=0.004) and Kavant (4.42, p=0.000). Whereas no significant differences were observed for Nasvadi (7.95) with Sankheda (5.85) and Pavi Jetpur (6.30) blocks.

Further, concerning occupational skills, calculated mean scores varied significantly between the categories of the ASHAs with excellent occupational (6.48) skills and a moderate level of occupational skills (4.89, p=0.002). This infers that ASHAs with excellent occupational skills used more Health Communication Strategies than the ASHAs with a moderate level of occupational skills.

Those ASHAs, having excellent occupational skills might have been benefited with the use of various Health Communication Strategies for keeping and informing about health data. Therefore, they may be motivated to use them more for this purpose than those with a moderate level of occupational skills. However, it is interesting to note that there was no significant difference between the mean scores of categories of the ASHAs having excellent occupational skills and those with poor occupational skills.

This means those ASHAs having poor occupational skills also used more number of Health Communication Strategies to support their assigned job-related data to cover-up their limitation related to occupational skills.

The ASHAs are supposed to be the link worker/ and service provider. She has to essentially maintain the record of drugs, other supplies and data related to birth-death, ANC, PNC, eligible couple, TB – leprosy patients *etc.* she has to inform about any health emergency or outbreak of epidemic in their assigned area.

Hence, for fulfilling these responsibilities ASHAs were provided with certain health communication strategies, out of which majority of them used less number of Health Communication Strategies which included; register, diary, *Mamta* card and mobile phones only. Moreover, their use varied significantly with their geographical location – block and occupational skills.

4.5.2 Responses of the ASHAs during FGDs to Use of Health Communication Strategies

During the Focus Group Discussions, the ASHAs were asked about their use of Health Communication Strategies while performing their duties viz; Home-visit, planning and celebrating VHND-Village Health and Nutrition Day (*Mamta day*), visit health facilities, Village Health Sanitation and Nutrition Committee (VHSNC) Meeting and keeping and informing about records.

Box 11

Verbatims of the ASHAs on Use of Health Communication Strategies

Use of Health Communication Strategies by the ASHAs
'રસીકરણ ના ચાર્ટ/પોસ્ટર-કયા બાળકને કઇ રસી આવે-અમે બતાઇને સમજાઇયે.' *(Charts/posters on Vaccination; which vaccine to be given to the child at what age etc. are given, so we explain through it.)*
'ખોરાક વિશે ના ચાર્ટ આપેલા છે. અમે સાથે રાખીયે અને બહેનોને સમજાઇયે. એમાથી લીલા શાકભાજી, કઠોળ, દૂધ-દહી કોઇપણ શાકભાજી વિશેના પોસ્ટર્સ મમતા દિવસમાં બેસાડીને જ્યારે બેનો આવે ત્યારે બેસાડીને સમજાઇએ.' *(We are given charts on food and diet. We carry them with us (during the home visit) We explain to mother about green vegetables, pulses, milk and milk products etc. when they come on Village Health and Nutrition Day (Mamta Day). We make them sit (comfortable) and explain in detail.)*
'બાળકને સી આકારથી લેવાનું. પોસ્ટર્સથી સમજાઇએ.' *(I use a poster to explain position (C shape) of taking a baby)*
'પછી આંગણવાડી ઉપર એવા ચિત્ર દોરેલા છે. એ પણ બતાઇએ. ધાવણ કેવી રીતે આપવાનું, ધાવણ આપતી વખતે કયો ભાગ (દીતદી) એ પુરેપુરો અંદર જાય- એ રીતે અમારી બેનોને સમજાઇએ છે.' *(Posters/wall paintings are displayed at Anganwadi. We show them (mothers and family) and explain how to breastfeed, comfortable position of baby and mother (nipple) during breastfeeding)*

'મમતા કાડમાં સગર્ભા વિશેની બધી માહિતી આપેલી છે, તે વાંચી અને સમજાઈએ, ભણેલી બહેન ના હોય તો અમે સમજાઈએ છે અને ભણેલી બહેન હોય તો જાતે જ વાંચવાનું કહિએ છે.' *(We show Mamta card (Health Card) to ANC woman and explain about care to be taken. We ask them to read if she is literate otherwise, we read for them)*
'જ્યારે પણ કોઇ પણ બહેન પ્રેગ્નેટ થાય તો તેની સાસુને પણ સમજાવવું પડે છે કે તેની બધી રસી માટે તેની વહુને આવવા દે. અમે એ બધી જાણકારી મીટીંગ દ્વારા મમતા દિવસમાં પોસ્ટર થી સમજાવીએ છે. તે પોસ્ટર દિપક ફાઉન્ડેશન દ્વારા અમને આપેલ છે. પછી ફલીપબુક પણ ત્યાંથી આપેલ છે.' *(When any woman conceives, our important task is to convince her mother-in-law to allow her to take vaccines during pregnancy period. We call for a meeting with mother-in-low and provide all this information using Mamta card, poster and flipbook during Mamta Day.)*
'સી.યુ.જી. કાર્ડ આપેલા છે. અમે ફોન કરીએ, સલાહની આપ-લે કરીએ, મીટીંગ ગોઠવીએ અને કાર્યક્રમ પણ વાપરીએ.' *(CUG SIM card is provided to us, which we use for calling, arranging meetings and for programme coordinating with other staff)*

It can be derived from the findings that the ASHAs do not have many options for use of Health Communication Strategies. However, within limited availability of such communication strategies, very high majority of the participant ASHAs shared that on their induction to ASHA programme, they were provided with ASHA kit (*Mamta* kit) which includes ASHA diary, *Mamta* card (Health card) and registers.

ASHAs organized group discussions on Village Health Nutrition Day (VHND) to explain and demonstrate important concepts related to infant care, nutrition, immunization and health care. They explained the importance of institutional delivery with the help of *Mamta* card, also information regarding various Government schemes was shared to the people through Flipbook.

> *'We use flipbook, flashcards, posters and sometimes presentations during Mamta session' (shared by the ASHAs)*

ASHAs also informed that they organize weekly programs that include a meeting to provide detail information to beneficiaries. Sometimes they organise street play for creating awareness amongst the general public. They put up big hoardings to gather the public. The ASHA expressed that,

> *'Banners and booklets are useful while explaining about Chiranjivi Yojana and its benefits.'*

The researcher was informed about indirect use and exposure to folk media, according to the ASHAs from Chhotaudepur block, Government and some local NGOs have organised street play and folk performance to spread awareness to the public. In past, they conducted puppet shows for the benefits of people.

This finding was reconfirmed (similar detail was also shared) by the Chief District Health Officer (CDHO) during his interview. In his words,

> *'we plan for Mass level awareness programmes, wherein we invite (hired help) folk groups. Such 3-4 performances in recent past on the importance of institutional delivery, sex determination (preference for a male child), the importance of girls' education etc. were organised'.*

4.5.3 Responses of the ASHA Facilitators during FGDs to Use of Health Communication Strategies

Box 12

Verbatims of the ASHA Facilitators on Use of Health Communication Strategies

Use of Health Communication Strategies by the ASHA Facilitators
'આશા જોડે થી બધી માહિતી અમે એફ.એચ.ડબ્લ્યુ. બહેનને આપીએ જે તે પી.સી.એચ. ની અંદર એફ.એચ.ડબ્લ્યુ સિસ્ટરને આપે અને પછી માસિક મીટીંગ રાખીએ અને માસિક મીટીંગ ની અંદર બધા રીપોર્ટીંગ બનાઇયે ને પછી એ રીપોર્ટ અમે બ્લોક લેવલ એ આપીએ.' *(We compile details from the ASHA and give to FHW, they hand it over to PHC. During our monthly meeting we prepare a report and submit at the block level.)*
'જેમ કે ગર્ભવતી માતા ને ચાર્ટ વડે સમજણ આપે કે એચ.બી. ઓછી છે તો બનાવે કે એક બાજુ ફિકાસ પડતી જીભ હોય ને એચ.બી. સારુ હોય તો લલાસ પડતી જીભ... એ પ્રમાણે ઉદાહરણ આપીને બતાઇએ.' *(We show comparative charts to explain condition, sign and symptoms of anaemia to expecting mothers, like on one side pale tongue and Red/healthy on the other side)*
'બેનો ને કુટુંબીજન વિશેની માહિતી, નમૂના દ્વારા આપીએ છે. જેવી રી માલા-ડી, કોપર-ટી, કૉન્ડોમ વિશે પ્રેઝન્ટેશનથી સમજાવીએ.' *(Women are explained about contraception, by showing them samples like Oral Contraceptive Pills, Copper-T and also organise for presentation.)*
'આશા બહેનોની સાથે મળીને મીટીંગના ટાઇમ એ સગર્ભા માટેના પોસ્ટર બતાવીને સમજાવવામાં આવે છે' *(During the meeting on Mamta day, we show posters about pregnancy and explain to expected mothers...)*
'અમે લેપ્રોસી ના દર્દીઓને કાર્ડ આપીને એના કાર્ડ દ્વારા સમજણ અને જાણકારી આપી રોગનું નિદાન લાવીએ.' *(We give leprosy card to the patient. We explain, help them in understanding symptoms and then make a diagnosis.)*

'મમતા કાર્ડમાં બધા જ વિષયની માહિતી આપેલ છે, કે બધાએ કેવી રીતે ખાતા શિખવાડવુ, કેવી રીતે પોષણ કરવું, જ્યારે માતા નોંધણી કરવા આવે છે ત્યારે મમતા કાર્ડ આપીએ છે.'

(all types of information are given, how to start weening, the importance of nutrition etc...when mother approach for early registration that time we issue Mamta card to her.)

The ASHA Facilitators responded that while they conduct home visits and hold sessions during *Mamta* divas, they spread awareness and provide health education. They used posters, charts, banners, Flipbooks and their own Work Experiences to explain beneficiaries, their families and educate them regarding pregnancy, about low Haemoglobin blood count in pregnant women, through comparative pictures like of pale tongue and of the healthy tongue, further they ask them to observe any differences in themselves and eat healthy food. Basic newborn care to be taken at home is taught by demonstration like, how to wrap a newborn *etc.*

ASHA Facilitators used *Mamta* card while interacting with mothers on *Mamta* day and TeCHO mobiles (available with FHWs) were also used to show videos. They explained mothers about contraception, through presentation and samples of Mala-D, Copper-T, *etc.*

'જેટલી પણ માતા અને મહિલાઓ મમતા દિવસ આવે છે, તેમને અમે ગર્ભનિરોધક ફાયદા વિશે સેમ્પલ, પોસ્ટર દ્વારા, ફલીપબુક અને પત્રિકા દ્વારા સમજણ આપીએ છે.'

(All those mothers who attend Mamta day, we explain them about contraception through sample, poster, Flipbook and leaflets.)

It was mentioned that they maintain a daily diary and register for records to be sent to the respective FHW. They shared that under 'School Health Programme' they organize presentations at school on topics of health care, mensuration and related hygiene, nutrition *etc.*

4.5.4 Responses of the Female Health Workers during FGDs to Use of Health Communication Strategies

Box 13

Verbatims of the Female Health Workers on Use of Health Communication Strategies

Use of Health Communication Strategies by the FHWs
'મમતા કાર્ડ સમજવાની ને પણ કહીએ છે. જેમ કે અમુક લોકો ને પોતાની જાત ઉપર ઉદાહરણ આપીએ છે. જેમ કે અમુક ને ત્રણ છોકરીઓ હોય તો પણ ગર્ભનિરોધક ઉપાય કરતા નથી.' *(Mamata card is used to explain the importance of contraception, we give our example…Comparative examples make it clearer with beneficiaries who do not adopt any contraception…even after three girl children (desire for a male child))*
'અમને પોસ્ટર, ફ્લીપબુક, સ્ટીકરો, ભીંત ચિત્રો, ટેક્નો, સેટકોમ, વિડીઓ બતાવીએ છે.' *(We use posters, flipbooks, stickers, wall painting, TeCHO-mobile, SATCOM and videos)*
'ચાર્ટ હોય, એ બતાવીને હેલ્થ એજ્યુકેશન આપીએ છે.' *(For Health education, (we) show chart)*
'(ટેકો મોબાઇલ રીફઈ) ફેમીલી સર્વેની એન્ટ્રી.' *(TeCHO mobile is very useful in making data entry during the family survey)*
અત્યારે તો ટેકો મોબાઇલ માં ઓનલાઇન એન્ટ્રી કરી શકીયે છે. રજીસ્ટ્રેશન કરી શકીયે છે. ગામના લોકોને હેલ્થની જરુરી માહિતી આપી શકીયે છે. લાભાર્થીઓ ને વીડિયો બતાવીને સમજાવી શકાય છે. જેમ કે તમાકુ ખાતા હોય તો ના ખાવી જોઇએ તેવો વીડિયો બતાવીએ છે. ' *(At present, we use TeCHO mobile for most of the tasks like online real-time entry, can make registration, providing health-related information to villagers…for example, showing videos on harmful effects of Tobacco to the addicted person.)*
'આશા બહેનો, ફેસીલીટર બહેનો, આરોગ્યના દિવસે (મમતા ડે) ભેગા મળીને કોઇક વાર ભવાઇ અને નાટકો દ્વારા માહિતી આપીએ છે.' *(On Mamta day sometimes, we along with ASHAs and ASHA Facilitators plan for drama and perform in front of women.)*

FHW stated that they were provided with posters/ charts related to vaccinations, pregnancy, immunization, cancer and so on. They also used samples of Oral Contraceptive Pills, Copper-T, condom to explain about methods of contraception.

'અમને પોસ્ટર, ફલીપબુક, સ્ટીકરો, ભીંતચિત્રો, ટેક્નો, સેટકોમ, વીડિયો બતાઈયે છે.'

(We use posters, flipbooks, stickers, wall painting, TeCHO-mobile, SATCOM and videos)

FHWs informed that they utilized mikes and loudspeakers during polio campaigns. They also used TeCHO mobile and computer for online and offline data entry, conducted the survey and its videos they used to provide health education to people in the village.

During the discussion it was commonly voiced that they all use and were dependent on TeCHO mobiles since it has all features like data collection, entry, sharing and archival regarding contraception, family planning, eligible couples, vaccination *etc.*

'અત્યારે તો ટેક્નો મોબાઇલમાં ઓનલાઇન એન્ટ્રી કરી શકીએ છે. રજીસ્ટ્રેશન કરી શકીએ છે. ગામના લોકોને હેલ્થ ની જરુરી માહિતી આપી શકીએ છે. લાભાર્થીઓને વીડિયો બતાવીને સમજાવી શકાય છે.'

(At present, we use TeCHO mobile for most of the tasks like online real-time entry, can make registration, providing health-related information to villagers….)

'મમતા કાર્ડ સમજાવીને પણ કહીએ છે. જેમ કે અમુક લોકો ને પોતાની જાત ઉપર ઉદાહરણ આપીએ છે. જેમ કે અમુક ને ત્રણ છોકરીઓ હોય તો પણ ગર્ભનિરોધના ઉપાય કરતા નથી.'

(Mamta card is used to explain the importance of contraception, we give our example…Comparative examples make it clearer with beneficiaries who do not adopt any contraception…even after three girl children (desire for a male child))

Mamta card was also used to explain in detail during a counselling session on *Mamta* day and during home visit. They also mentioned that along with ASHAs, ASHA Facilitators they organised for Drama and role-plays to give the important messages on health and promotion of health programmes. At PHC level, in past, they had organized street plays so that they can seek the attention of a maximum number of beneficiaries and can spread awareness amongst them.

They shared that under 'School Health Programme' they organized presentations at school on topics of health care, menstruation and related hygiene, nutrition *etc.*

Discussion:

Survey and FGDs findings on the use of Health Communication Strategies revealed that ASHAs used *Mamta* card, ASHA Diary and registers for most of their duties. ASHA diary is not only a note-taking diary but it has pictures, important concept notes and pages to maintain records related to eligible fertile couples, number of pregnancy-delivery, available stock *etc. Mamta* card is issued to the expected mother on the registration of pregnancy and maintained until total vaccination of the born child. It has a pictorial explanation about ANC-PNC, new-born care, breastfeeding, weaning and vaccination for mother and children. Besides these, the ASHAs used registers to maintain all health-related records and information of the respective village.

Similar findings were reported by Zulliger et al. (2014) that 'CHWs with limited education has been a significant provider of IEC including facilitation to support client's entry and maintenance in the formal health system. They incorporate local knowledge and understanding of illness in their communication.'

Keller and Lehman (2008) emphasised on 'use of case information, social consequences, other-referencing, female communications and messages on detection behaviours to enhance health interventions.'

UNICEF (2013), highlighted upon strong association among effective intervention by community volunteers, desirable health behaviours and services used by beneficiaries.

Hospital Visit made by ASHA at least once in a week to seek information related to health care services, nutrition, drugs *etc.* (Arya K,2016). Thakur et al. (2017) noted the availability of adequately trained ASHAs at the village level to mobilise community members regarding different health issues.

Kaur et al. (2017) in their study acknowledged efforts of *Sakshar Mahila Samooh* (SMS)–women lead groups, for regularly holding meetings, rallies, competitions *etc.* to communicate health messages and mobilising the community. Collective actions taken by SMS can have collective learning that builds confidence in women from al caste or class groups.

Achyut et al. (2016) 'The programme used field generated inputs to develop a full set of communication materials included handouts such as counselling cards, fact sheets and frequently asked questions (brochures/print materials) as well as posters and wall paintings that included similar information by the method. The materials had similar branding as consistent messages that were meant to complement the Government of India and Government of Uttar Pradesh Family Planning (FP) strategies. These communication materials were used by CHWs for counselling in health facilities and appeared as posters on walls in facilities and communities.'

It is discouraging to note that the ASHAs have limited provision of Health Communication strategies and at the same time encouraging that they fulfil the majority of their duties wholeheartedly using limited resources. The findings highlighted that ASHAs under present study is rigorously involved in reaching out to all beneficiaries of her allotted area with individual approach during a home visit; with a group during the planning and organising Village Health and Sanitation Committee meeting and Mass level programme planning and execution of Village Health and Nutrition Day (*Mamta* day). She approaches health facilities for seeking information,

escorting mothers and general patients too, during this she would also explain about reasons and treatment for health concerns.

Findings reflected that both ASHAs and Female Health Workers were provided with ASHA kit and TeCHO mobile respectively; however, ASHA Facilitators were not provided with either of these. This reflected their comparative lack of use and more of need for such Health Communication Strategies from the NHM administrators.

The researcher observed that Female Health Workers commonly and highly used Health Communication Strategies namely *Mamta* Card, registers and mobile phones under Inter-Personal Communication for a Home visit, planning and organising *Mamta* Day (Village Health and Nutrition Day) and keeping and informing about records. Mobile phones and TeCHO phones were used to contact patients, community people and health care staff; for record-keeping and retrieval of data in times of taking a decision, monitoring and many such intentions. This can lead to providing patient-centred care in more efficient, effective and timely.

Data related to use of Health Communication Strategies by the ASHAs, ASHA Facilitators and Female Health Workers, bring to the notice that mostly ASHA kit (*Mamta* Card, ASHA Diary and Registers) and TeCHO-mobiles were used during health promotion and service delivery. However other communication approaches were comparatively less used.

This demands serious attention on part of NHM officials and media experts who are responsible for community process component of NHM. They need to take up research to find out evidence-based success stories, reasons for use of specific communication tools. Such research would give direction for future design, production and provision of need-based, usable job aids for grass-root level health workers and volunteers to foster their on-field communication efforts and thereby behavioural change.

4.6 Perceived Benefits of Health Communication Strategies

4.6.1 Perceived Benefits of Health Communication Strategies expressed by the ASHAs

Table 62

Categorisation of the ASHAs according to Perceived Benefits of Health Communication Strategies **n=326**

Perceived Benefits of Health Communication Strategies	f	%
Extremely Beneficial	197	60.4
Moderately Beneficial	119	36.5
Least Beneficial	10	3.1

Figure 40

Categorisation of the ASHAs according to Perceived Benefits of Health Communication Strategies **n=326**

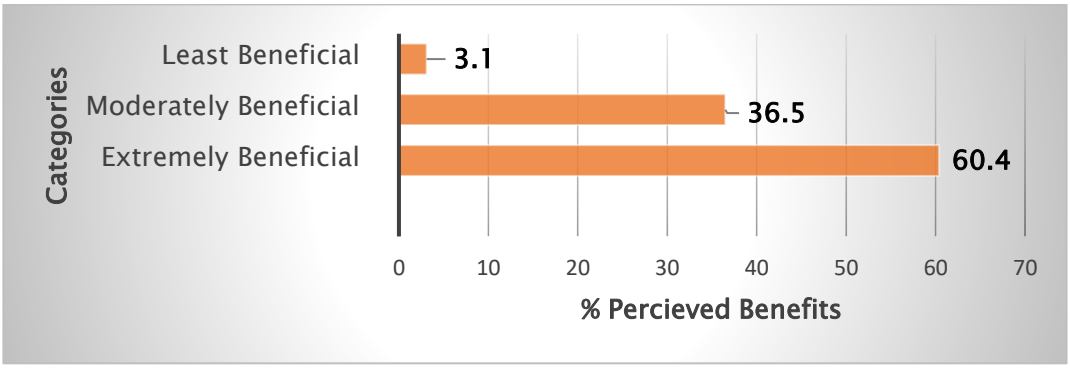


Table 62 and figure 40, show that majority *i.e.* 60.4 % of the ASHAs felt that Health Communication Strategies were extremely beneficial. Whereas some *i.e.* 36.5% and a very few 3.1 % of the ASHAs expressed that Health Communication Strategies were moderately beneficial and least beneficial respectively.

Table 63

t-test showing variable wise differences in Perceived Benefits of Health Communication Strategies by the ASHAs **n=326**

Variable	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	96.29	11.63	1.366	0.173	NS
	Older	180	97.96	10.47	1.351		
Work Experience	Less Work Experience	116	97.25	11.05	0.047	0.963	NS
	More Work Experience	210	97.19	11.02	0.047		
Training	Partially Trained	34	99.7	10.7	1.414	0.158	NS
	Completely Trained	292	96.9	11.0	1.445		

***p<0.05, NS- Not Significant**

Above table 63 depicts that no significant differences in 'Perceived Benefits of Health Communication Strategies' were observed amongst ASHAs for their age, Work Experience and training received under NHM.

Therefore, null hypotheses stating that there will be no significant differences in 'Perceived Benefits of Health Communication Strategies' by the ASHAs with their age, Work Experience and training received under NHM were accepted.

Table 64

Analysis of Variance (ANOVA) showing variable wise differences in Perceived Benefits of Health Communication Strategies by the ASHAs **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-value	*p-value*	Remarks
Block	Between Groups	4074.2	5	814.8	7.4	0.000*	**Significant**
	Within Groups	35364.2	320	110.5			
Educational Qualification	Between Groups	699.3	3	233.1	1.9	0.123	NS
	Within Groups	38739.1	322	120.3			
Occupational Skills	Between Groups	8739.6	2	4369.8	46.0	0.000*	**Significant**
	Within Groups	30698.8	323	95.0			
Knowledge regarding HCS	Between Groups	41.2	2	20.6	0.2	0.845	NS
	Within Groups	39397.2	323	122.0			
Media Use	Between Groups	515.6	2	257.8	2.1	0.119	NS
	Within Groups	38922.8	323	120.5			

***p<0.05, NS- Not Significant**

Table 64 depicts that significant differences were observed in ASHAs according to their blocks and occupational skills for 'Perceived Benefits of Health Communication Strategies'.

Therefore, null hypotheses stating that there will be no significant differences in 'Perceived Benefits of Health Communication Strategies' by the ASHAs with their blocks and occupational skills were not accepted.

However, no significant differences were found in 'Perceived Benefits of Health Communication Strategies' by the ASHAs according to their education, knowledge regarding Health Communication Strategies and Media use.

Thus, null hypotheses stating that there will be no significant differences in 'Perceived Benefits of Health Communication Strategies' by the ASHAs with their education, knowledge regarding Health Communication Strategies and Media use were accepted. Therefore, Tukey's HSD test was applied to further compare and find out which groups have significant difference amongst them.

Table 65

Tukey's HSD comparison for Perceived Benefits of Health Communication Strategies by the ASHAs *with Block and Occupational Skill* **n=326**

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig.
Block	Chhota Udepur $\overline{x}$=91.12	Sankheda $\overline{x}$=100.57	-9.45614*	1.96918	.000
		Bodeli $\overline{x}$=102.20	-11.07719*	2.03693	.000
		Nasvadi $\overline{x}$=97.15	-6.02719	2.16833	.063
		Pavi Jetpur $\overline{x}$=96.37	-5.24862	1.87552	.060
		Kavant $\overline{x}$=96.57	-5.45412	2.01596	.077
	Bodeli $\overline{x}$=102.20	Pavi Jetpur $\overline{x}$=96.37	5.82857*	1.94654	.035
		Moderate $\overline{x}$=94.16	8.07593*	1.15943	.000
Occupational Skill	Excellent $\overline{x}$=102.24	Poor $\overline{x}$=87.82	14.41589*	1.71210	.000
	Moderate $\overline{x}$=94.16	Excellent $\overline{x}$=102.24	-8.07593*	1.15943	.000
		Poor $\overline{x}$=87.82	6.33996*	1.74620	.001

***p<0.05**

It can be seen from the above table 65 that there were significant mean differences among the selected categories. The ASHAs who belonged to Sankheda (110.57, p=0.000) and Bodeli (102.2, p=0.000) had highly significant mean

difference than their counterparts from Chhotaudepur (91.12) concerning their perceived benefits of Health Communication Strategies. Similarly, the ASHAs from Bodeli (102.24) block had a significant mean difference than ASHAs belonging to Pavi Jetpur (96.37, p=0.035). It can be said that the ASHAs belonging to Bodeli and Sankheda blocks perceived that the Health Communication Strategies were extremely beneficial.

Further, the ASHAs who had excellent occupational skills (102.24) recorded highly significant mean difference than the ASHAs with moderate (94.16, p=0.000) and poor occupational skills (87.82, p=0.001), when checked for their perception about benefits of Health Communication Strategies. In the same way, ASHAs possessing moderate occupational skills found to have significantly high mean score than their counterparts *i.e.* excellent (102.24, p=0.000) and poor occupational skills (87.82, p=0.001). This means the ASHAs with an excellent and moderate level of occupational skills perceived that the Health Communication Strategies were extremely beneficial.

Table 66

Intensity Indices of the Perceived Benefits of Health Communication Strategies expressed by the ASHA

Perceived Benefits of Health Communication Strategies	I.I.
Help in rapport building	4.6
Help in building my Identity/provide Social recognition	4.4
Provide scope for repetition/reminders for the adoption of behaviour/innovation amongst beneficiaries	4.4
Assist in promoting services and innovations amongst beneficiaries	4.4
Help in improving my performance	4.3
Reaching out to/informing a large number of beneficiaries at a time	4.3
Maintain Top to bottom and peer group communication/connectivity	4.3
Help in documentation	4.3

Help in increasing my self-confidence	4.3
Easy understanding of complex concepts with the help of visuals for beneficiaries	4.3
Creating a conducive environment for the adoption of behaviour/innovation amongst beneficiaries	4.2
For patient diagnosis in a remote area	4.2
Motivating to accelerate the pace of adoption of behaviour/innovation amongst beneficiaries	4.2
Seeking attention of beneficiaries	4.2
Assist in Recordkeeping/event tracking	4.2
Help in shaping opinion/attitude before the adoption of behaviour/innovation	4.2
Help in setting up an agenda for public debate and advocacy	4.1
Data collection and reporting	4.1
Keeps on track while explaining any topic	4.0
Seeking support for treatment decision	4.0

Table 66 revels that very high-intensity indices were observed for the majority of the items. It reflects that the ASHAs felt that the following are the benefits of Health Communication Strategies:

- Help in rapport building.
- Help in building my Identity/provide Social recognition.
- Provide scope for repetition/reminders for the adoption of behaviour/innovation amongst beneficiaries.
- Assist in promoting services and innovations amongst beneficiaries.
- Help in improving my performance.
- Reaching out to/informing a large number of beneficiaries at a time.
- Maintain Top to bottom and peer group communication/connectivity.
- Help in documentation.
- Help in increasing my self-confidence.

- Easy understanding of complex concepts with the help of visuals for beneficiaries.
- Creating a conducive environment for the adoption of behaviour/innovation amongst beneficiaries.
- For patient diagnosis in a remote area.
- Motivating to accelerate the pace of adoption of behaviour/innovation amongst beneficiaries.
- Seeking attention of beneficiaries.
- Assist in Recordkeeping/event tracking.
- Help in shaping opinion/attitude before the adoption of behaviour/innovation.

The sampled ASHAs in present study reflected high perception towards the majority of the items on the benefit of Health Communication Strategies.

The ASHAs are supposed to be link workers, service provider and health activist which they discourse through five activities viz, home visit, Village Health and Nutrition Day, visit health facilities, Village Health Sanitation Committee meeting and record keeping.

Data reflected that; the occupational skills of the ASHAs have helped them to shape their perception about the benefits of Health Communication Strategies in all the above five conditions for fulfilling her expected roles.

The Health Communication Strategies can be certainly beneficial for report and identity building, improvement in performance, explaining difficult concepts, creating a conducive environment, motivating beneficiaries for adopting behaviour/ innovation, seeking attention, shaping behaviour and attitude among beneficiaries during her meeting at households, Anganwadi on VHND and visit health facilities.

Moreover, new media and technology would serve the ASHAs during patient diagnosis in remote areas, record keeping, event tracking, being connected with top-down and peer group and maintaining daily schedules. Shah et at. (2018) documented matching benefits of mHealth intervention felt by the ASHAs in Bharuch and Narmada districts of Gujarat state.

Certain communication media can help ASHAs in convincing and negotiating with beneficiaries, health care staff as well as VHSC members. Further, if for record-keeping and documentation innovative media are provided then it could improve in her performance for duty during VHSC and health emergency for procuring necessary supply as well as a required arrangement to handle the health problem.

Further for the following items, the ASHAs reported that they were moderately beneficial:

- Help in setting up an agenda for public debate and advocacy.
- Data collection and reporting.
- Keeps on track while explaining any topic.
- Seeking support for treatment decision.
- Maintaining Electronic health records.
- Enable in managing multiple tasks.
- Assist as a reference note while explaining the content.

The above benefits with moderate intensity indices refer majority to electronic and new media, which the ASHAs have not directly used for her work. Since she has observed FHWs using that smartphone-based application and may be the availability of smartphone at households of few of the ASHAs, she expressed a moderate level of benefits. The new technology would equip and facilitate the ASHA in all five activities to perform her roles efficiently.

4.6.2 Responses of the ASHAs during FGDs to Perceived Benefits of Health Communication Strategies

The participant ASHAs in all six Focus Group Discussions were asked about their perception regarded to the benefits of Health Communication Strategies. Their deliberations are listed below in the following box and discussed in detail in subsequent paragraphs.

Box 14

Verbatims of the ASHAs on Perceived Benefits of Health Communication Strategies

Perceived Benefits of Health Communication Strategies by the ASHAs
'પહેલા એમ હતુ કે ડિલીવરી થાય તો આ ખવાય નહિં, તે ખવાય નહિં... પહેલા કૃપા ફાઉન્ડેશન ની બુક હતી. એ એમને બતાવીએઅને એ સમજે. એટલે હવે બધુ ખવાય.' *(There existed myths about food to eat during lactation, we use flipbook given by Kripa Foundation. We show pictures of nutritious food items and explained to beneficiaries. Now they have started eating accordingly.)*
'હા, ફેર તો પડે. ભવઈ થી ફેર પડે.' *(Yes, of course, folk media like Bhavai is very useful to bring in desirable behavioural change.)*
'મમતા કાર્ડ પર આશા નો નંબર હોય. આમા કેવુ કે જનની સુરક્ષાના લાભો મળે ને એટલે જલ્દી રજીસ્ટ્રેશન અમારે સારુ થાય.' *(Villagers have ASHA's mobile number on the Mamta card, they call us in emergency and also for early registration for getting benefits of Government schemes like Janani Suraksha.)*
'અમારા ગામડાના માણસો અભણ હોવાથી ચિત્રો અને પ્રેઝેન્ટેશન દ્વારા સરલ રીતે સમજી શકે છે.' *(Majority people in our village are illiterate, they understand better with pictures and presentations.)*
'ચિત્રોવાળા માધ્યમોથી સમજાવવાનુ સરળ થાય છે અને લાભાર્થી સમજે પણ છે.'

(Graphic media facilitate easy explanation and foster understanding.)
'ભીંતચિત્રો એ લોકો જુવે એટલે અમને પુછે અને સંદેશા યાદ પણ રહે છે.' *(When people see wall painting, they inquire about it (content) and they remember for long.)*
'લોક માધ્યમો જોવા માટે લાભાર્થીઓ વધારે ભેગા થઈ જાય છે અને કુટુંબના બધા સભ્યો આવી જાય છે.' *(Folk media are the major attraction and villagers with their family members willingly come to attend such programmes)*
'પહેલા ડિલીવરી ઘરે જ કરાવતા હતા. પણ હવે અમે મમતા કાર્ડ થી સમજાવીએ છે કે ડિલીવરી પી.એચ.સી. કે સી.એચ.સી. માં જ કરાવવી.' *(In past, Delivery was done at home by Dais (Local Birth Attendant) Since now we explain beneficiaries, importance of institutional delivery using Mamta Card, there is a positive change in practice.)*

According to the ASHAs, Health Communication Strategies like posters, presentations and charts with pictures were effective especially for the women who were not educated. Variety of charts and posters made their task easy to explain. They expressed the significance of graphic media by saying,

'ચિત્રોવાળા માધ્યમોથી સમજાવવાનુ સરળ થાય છે અને લાભાર્થી સમજે પણ છે.'

(Pictures facilitate in easy explanation and foster understanding.)

Regarding mother and child care, nutrition, maintaining a schedule for regular ANC and PNC, the importance of institutional delivery *etc.* Media having graphics or pictures helped beneficiaries to identify with symptoms and danger signs associated with anaemia, leprosy, TB *etc.*

The ASHAs mentioned that the register, *Mamta* card, ASHA diary and medicine kit helped to organize details regarding pregnancy, HB, weight and nutritional supplement for mothers. *Mamta* card was used most frequently. (as it was handy too). During *Mamta* day; posters, *Mamta* card and samples (contraceptive) were used by

them for health education and spread awareness among mothers, their mothers-in-law regarding vaccination, nutrition and reproductive health care.

ASHA shared about providing information regarding various Government schemes to the people through the flipbook. They also observed the difference in women in terms of approaching ASHAs for health-related issues, this was attributed to the spread of information on *Mamta* day and during Home visits.

> *'ગામડામાં બધાની પરિસ્થિતિ સારી ન હોય ત્યારે સરકારી યોજના જેમ કે ચિંરજીવી કે જનની સુરક્ષા ના લાભો મળે તો એમને ઘણી મદદ રહે છે.'*
>
> *(Poor families in Village, have started taking benefits of Chiranjivi Yojana and Janani Suraksha Yojana. They get monetary and free health benefits which make their life better)*

One ASHA shared that they prefer posters, street plays, presentations and puppet shows to reach out to a large number of people for creating awareness.

Almost all the ASHAs mentioned the benefits of mobile phones not only for emergency contact but also to remain in contact with their family members while accompanying patient and mother during delivery. They consult ANM and Doctor for early diagnosis of symptoms during their home visit. Moreover, Mobile phones helped them to inform about any outbreak of disease and information on birth-death in the village.

4.6.3 Responses of the ASHA Facilitators during FGDs to Perceived Benefits of Health Communication Strategies

Box 15

Verbatims of the ASHA Facilitators on Perceived Benefits of Health Communication Strategies

Perceived Benefits of Health Communication Strategies by the Selected ASHA Facilitators
'મમતા કાર્ડમાં ચિત્રો ભી હોય જેથી સરલ રીતે સમજી શકે છે.' *(Pictures in Mamta card helps in easy understanding.)*
'લેપ્રોસી કાર્ડ અને બીજા વિષયના પોસ્ટરો બહુ ઉપયોગી છે.' *(Small Cards (for Counselling) on leprosy and posters on other topics are very useful.*
અમારા વિસ્તારમાં કોઇ પણ જાણકારી પહોંચાડવા માટે પત્રિકાઓ અને મોબાઇલ ફોન ઉપયોગી છે.' *(In our area, we can conveniently disseminate information through leaflets and mobile phones.)*
'જો અમને ખબર ના પડી હોય તો તેમને ફોન કરીને, વાતચીત કરીને પ્રશ્નોના ઉકેલ મેળવીએ છે.' *(Mobile phones establish a link between us and beneficiaries…they call us in times of doubt/query...which we try to solve over phone.)*

One ASHA Facilitator shared that the usual interactions and conversations along with *Mamta* card to guide mothers, which has a lot of pictures is found to be effective. The card has the entire schedule of ANC-PNC visit, the importance of institutional delivery, danger signs and symptoms associated by the mother and baby, supplementary feeding, growth chart of baby, vaccination schedule *etc.*

The flipbooks, small posters, small banners related to health care found to be beneficial while explaining symptoms, the treatment procedures, during their visits to villages. Display of posters and banners at public places help in creating awareness amongst people. ASHA Facilitator and ASHAs organised *Sanjivni Samiti*, to gather

people to inform them about messages from PHC on a weekly bases and spread information through pamphlets and two-way communication.

According to ASHA Facilitator, posters and small cards were the most beneficial, for counselling, to easily explain treatment and follow-up procedures. ASHA Facilitators shared that they have cards for leprosy which has information about certain vaccinations, which they show during the explanation. One ASHA Facilitator stated that posters were also helpful to explain benefits available under various schemes and to get free of cost treatment at hospitals.

4.6.4 Responses of the Female Health Workers during FGDs to Perceived Benefits of Health Communication Strategies

Box 16

Verbatims of the Female Health Workers on Perceived Benefits of Health Communication Strategies

Perceived Benefits of Health Communication Strategies by the Female Health Workers
'પોસ્ટરો વધુ વપરાય છે. જે પણ ઘરમાં જરુરી લાગે તેમના ઘરે જઈ ને સમજણ આપીએ છે.' *(Use of posters is more, we visit the identified households to explain)*
મારા મંતવ્ય પ્રમાણે પ્રેઝન્ટેશન વધારે સારું લાગે છે. જેમ કે ટેક્નો મોબાઈલ માં નાની સ્ક્રીનમાં વીડિયો બતાવવા કરતા ભીંત ઉપર બતાવવું સરલ રીતે સમજી શકાય છે.' *(According to me, presentation is a better option. For example, instead of showing video in TeCHO-mobile, projection on a large screen/wall is more impactful.)*
'જેમ કે વધારે મોટી મીટીંગ હોય આખા ગામ ને જોડાવવાનું હોય તો સ્પીકર અથવા ગાડી ફેરાવીએ છે.' *(Like, when we have to invite/inform/mobilise the whole of the village, we use loudspeaker or a van/vehicle)*
'સૌથી વધારે મોબાઈલ દ્વારા એક બીજાને સંદેશો પહોંચાડવાનુ સરલ પડે છે.' *(Mobile phone facilitates in a fast and convenient medium to convey messages.)*

'ટેકો મોબાઇલમાં સારી સુવિધા પહોંચે , જેમ કે ઓનલાઇન-ઓફલાઇન એન્ટ્રી, જરુરત ના બધા ડેટા સંગ્રહ થઇ શકે છે.' *(TeCHO mobile has all facilities like online-offline data entry, required capacity for storage of the data.)*
'સાચી માહિતી એમા (ટેકો)થી મળી જાય છે.' *(TeCHO mobile referred for retrieval of authentic information/data)*

FHWs identified that presentations and videos shown from TeCHO-mobile make it easy for people to understand the importance of health care. The videos from mobile (given to FHW) were shown to ANC and PNC mothers, patients suffering from TB, leprosy, cancer *etc.* and encouraged them for Techeck-up and start with the proper treatment. It was shared that using videos over posters and banners made a difference as people watch and listen to the content rather than only seeing it. This makes it easier for them to remember the content that was shown to them since it involves two activities. Videos aroused curiosity and aroused interest in the mind of the mother regarding what will come next and all and so they sit and watch otherwise they leave in between.

Regarding TeCHO, mobile FHW shared that it had made their work easier than before, in terms of data entry of survey, finding family ID, information of child or mother can be accessed from the mobile. Also, TeCHO-mobile provides information regarding Health and other aspects through pictures, that is useful during meeting or awareness program to make it easier for people to understand- as stated by the majority of the FHWs.

One FHW observed that most of the people were uneducated so pictures made the task of explaining easier than lecture method, as it has information regarding TB, malnutrition, leprosy and so on.

ASHA Facilitators acted as a mediator between the ASHA and the FHW, they were connected through the phone. They contacted one another for some problem or work. According to some of them (FHWs), their workload of doing a manual entry

in total eight registers had decreased. They were able to do their work on time, that includes fieldwork visit schedule, its details could be filled and submitted. They shared that they enjoyed using TeCHO-mobile and their enthusiasm for work has increased due to TeCHO-mobile, earlier they wondered why this was given and how it would help, but now they feel that it has made their work easier as earlier they had to go to PHC, and the network was required to fill in details about the ANC and PNC. They could complete their work at anytime, anywhere even after coming home, they can make the entries.

E-*Mamta* portal was launched by the government to manage health data and information across the state. The FHWs are supposed to provide data to the operator at PHC to be uploaded. In recent days after the launch of TeCHO mobile, the same was managed by the FHWs themselves in parallel. Application on smartphone facilitates FHWs and ease out their work of real-time data entry and report generation. One FHW shared that online and offline entry could be done through TeCHO mobile that reached to the server where the data was saved and manual entries get noted in the report generated.

According to FHWs, phone contacts were useful for coordinated work, for village meeting and *Mamta* day, to circulate the schedule beforehand. Monthly reports of PHC activities like vaccination of children and mothers were done, progress is written about details like weight of child, place and time of birth, regarding vaccination.

Since they have realised and acknowledged the potential benefits of TeCHO mobile at their professional work front as well as for providing health education to beneficiaries, therefore the majority of them strongly recommended to transfer everything on a single platform and reduce the time of transition to optimise the use of human and technology resources for health care of community people.

They have observed that in any emergency people contact ASHA and facilitator as they have a phone to connect and exchange information.

Health Communication Strategies were used by FHW while spreading awareness regarding the fact that the sex determination of the child is dependent on

father. As per many FHWs, loudspeakers were beneficial for polio and *Mamta* day, and videos while home visits, also small posters and flipbook are of help for an explanation by giving examples.

Moreover, they thought that radio and SATCOM programmes were impactful where health-related information was broadcasted on every Tuesday and Saturday in their PHCs respectively.

Discussion:

It can be derived from survey and FGDs data that the ASHAs perceived the benefits of Health Communication Strategies, although they were limited and scarce. The probable reason could be that they have comparatively high exposure to various types of media used for Health communication purposes during their capacity building programmes.

There existed a significant difference with respect to the block they belonged to and their occupational skills. The ASHAs belonging to Bodeli and Sankheda had expressed the benefits significantly high. It may be attributed to the provision and use of Health Communication Strategies in their respective blocks.

Perceptions of the ASHAs, having an excellent and moderate level of Occupational skills towards benefits of Health Communication Strategies were significantly higher than their counterparts *i.e.* the ASHAs with poor Occupational skills. The reason could be, that the set of Occupational skills can make an ASHA an efficient health care activist under all dynamics of her work and application of skills accordingly viz, negotiation, coordination, communication, leadership and decision making. Potential benefits of Health Communication Strategies could be understood well by the ASHAs with an excellent and moderate level of occupational skills; therefore, their perceived benefits were significantly higher.

Seo and Matsaganis (2013) found that IPC (Inter-Personal Communication) is directly linked to health-enhancing behaviours, also mediates the influence of individual's multichannel media environment.

Very high-intensity indices were reported for the items like 'Helps in rapport building', 'Help in building my Identity/provide Social recognition', 'Provide scope for repetition/reminders for the adoption of behaviour/innovation amongst beneficiaries', 'Assist in promoting services and innovations amongst beneficiaries'. These suggest that Health Communication Strategies play a facilitative role while self-introduction and getting recognition among community people besides awareness generation, promotion of health benefits and bringing behavioural changes.

Haq and Hafeez (2009) found that media campaigns were successful in building the image of Health Workers as credible sources of health information.
Benefits of Health Communication Strategies are many which are enumerated by scholars in their researches too.

Ministry of Health, Cambodia (2011) documented that BCC forums were extremely important to discuss and spread awareness at the community level. VHSC meetings and VNHD provide the same scope for BCC activities.

The Mobile Phones have high potential to deliver effective medical services could be greatly enhanced, beyond basic communication support and education to CHWs-especially ASHAs, by use of advanced applications for monitoring disease, gathering medical data and accessing medical databases.

In present research data revealed that the ASHAs, ASHA Facilitators and Female Health Workers foresee that mobile phones especially smartphones were highly beneficial for being in contact with all stakeholders, helped in diagnosis in a remote area and assist in record keeping/ event tracking. These can be supported by Chib et al. (2012) as they noted evident benefits of mobile phone connectivity, even when extended to remote rural regions.

Ghosh and Saha (2013) designed the Health Communication Campaign to increase awareness, knowledge, and behaviours associated with positive health outcomes. Findings revealed that exposure to the intervention has a positive, significant net effect in increasing the level of awareness in identifying the signs and symptoms correctly for the general illnesses and reproductive ailments.

UNICEF (2013), Community Care of Mothers and Newborns (CCMN) package found that training modules were effective. Increased in desirable health and nutrition practices was attributed to an increase in home contact and information or advice provided by Community Volunteers.

All the researches mentioned above largely reflect the benefits of IEC/ IPC/ ICT materials and Health Communication Strategies promoting health-enhancing behaviour and health information. Thus, the findings related to benefits of Health Communication Strategies in the present investigation also revealed that majority of the respondents *i.e.* ASHAs, ASHA Facilitators and Female Health Workers have expressed that Health Communication Strategies were extremely beneficial for health communication.

Considering findings under 'Perceived Benefits of Health Communication Strategies' section, the researcher recommends that these Stakeholders (grass-root level health functionaries -ASHAs, ASHA Facilitators and FHWs) should be involved actively in planning, designing and monitoring of Health Communication Strategies.

Perception builds on an understanding of the phenomena since the majority of the ASHAs expressed extremely positive perception towards Health Communication Strategies, this leads to the conclusion that they have the same understanding too. FHWs and ASHA Facilitators under the study also reflected their positive perception towards benefits of Health Communication Strategies, they should also be a partner in designing of Health Communication Strategies. Ultimately stakeholders' involvement will lead to effective Health Communication.

4.7 Barriers related to selected aspects of Health Communication Strategies

4.7.1 Barriers related to Health Communication Strategies reported by the ASHAs

Table 67

Categorisation of the ASHAs according to Barriers related to Health Communication Strategies **n=326**

Barriers related to Health Communication Strategies	f	%
Extreme barrier	8	2.5
Moderate barrier	240	73.6
Least barrier	78	23.9

Table 67 and figure 41 reveal that high majority *i.e.* 73.6 % of the ASHAs experienced barriers related to selected aspects of Health Communication Strategies to moderate level. Whereas some *i.e.* 23.9 % of the ASHAs felt least barriers and a very few (2.5 %) of the ASHAs expressed that they face barriers to extreme level respectively.

Figure 41

Categorisation of the ASHAs according to Barriers related to Health Communication Strategies **n=326**

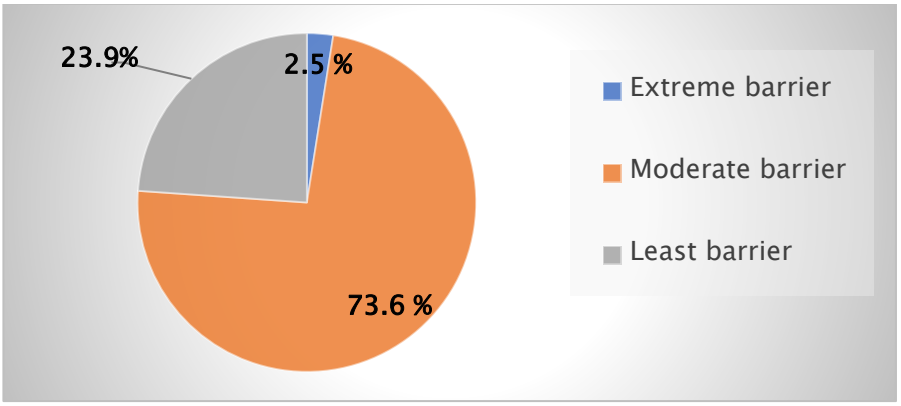


Table 68

t-test showing variable wise differences in Barriers related to Health Communication Strategies **n=326**

Variable	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	85.04	17.81	1.946	0.53	NS
	Older	180	81.08	18.62	1.955		
Work Experience	Less work experience	116	83.54	17.57	0.502	0.616	NS
	More work experience	210	82.48	18.78	0.512		
Training	Partially Trained	34	79.6	16.4	1.098	0.273	NS
	Completely Trained	292	83.2	18.5	1.210		

***p<0.05, NS- Not Significant**

Table 68 depicts that no significant differences in 'Barriers related to Health Communication Strategies' were found amongst the various categories of ASHAs for their age, work experience and training received under NHM. This means that age, experience and training did not make any difference in their experiences towards barriers related to Health Communication Strategies.

Therefore, null hypotheses stating that there will be no significant differences in 'Barriers related to Health Communication Strategies' among the ASHAs with their age, work experience and training received under NHM were accepted.

Table 69

Analysis of Variance (ANOVA) showing variable wise differences in Barriers related to Health Communication Strategies **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-value	*p-value*	Remarks
Block	Between Groups	8226.9	5.0	1645.38	5.2	0.000*	**Significant**
	Within Groups	101101.3	320.0	315.942			
Educational Qualification	Between Groups	1275.9	3	425.3	1.3	0.286	NS
	Within Groups	108052.3	322	335.6			
Occupational Skills	Between Groups	2344.2	2	1172.1	3.5	0.030*	**Significant**
	Within Groups	106984.0	323	331.2			
Knowledge regarding HCS	Between Groups	2519.3	2	1259.7	3.8	0.023*	**Significant**
	Within Groups	106808.9	323	330.7			
Media Use	Between Groups	2531.0	2	1265.5	3.8	0.023*	**Significant**
	Within Groups	106797.3	323	330.6			

***p<0.05, NS- Not Significant**

It is seen from the table 69 that 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'. Therefore, null hypotheses were not accepted.

However, no significant difference was found in 'Barriers related to Health Communication Strategies' among the ASHAs according to their education. Thus, the null hypothesis stating that there will be no significant difference in 'Barriers related to Health Communication Strategies' among the ASHAs with their education, was accepted.

Table 70

Tukey's HSD comparison for Barriers related to Health Communication Strategies among the ASHAs with Block, Occupational Skill, Knowledge regarding Health Communication Strategies and Media use **n=326**

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig.
Block	Bodeli $\bar{x}$=91.62	Nasvadi $\bar{x}$=85.20	8.39193	3.44408	.147
		Sankheda $\bar{x}$=77.64	13.97088*	3.44408	.001
		Chhotaudepur $\bar{x}$=83.22	6.42000	3.77059	.531
		Pavi Jetpur $\bar{x}$=77.20	14.42000*	3.29124	.000
		Kavant $\bar{x}$=85.53	6.08154	3.52060	.515
Occupational Skill	Excellent $\bar{x}$=85.60	Moderate $\bar{x}$=79.90	5.70000*	2.16443	.024
		Poor $\bar{x}$=81.85	3.74634	3.19616	.471
Knowledge regarding HCS	Low $\bar{x}$=88.11	Moderate $\bar{x}$=83.04	5.06674	2.85423	.180
		High $\bar{x}$=79.38	8.73336*	3.17406	.017
Media Use	Average $\bar{x}$=86.17	Low $\bar{x}$=83.25	2.92089	2.63785	.510
		High $\bar{x}$=79.74	6.43653*	2.33453	.017

***p<0.05**

It is seen from the table 70 that there were significant differences in the mean scores of the ASHAs belonging to the various categories of the selected variables. A highly significant difference in the mean scores of barriers faced by the ASHAs

belonging to Bodeli (91.62) with those of Sankheda (77.64, p=0.001) and significant with those of Pavi Jetpur (77.20, p=0.000) can be seen from the data in the table. Whereas there were no significant differences reported amongst the ASHAs belonging to Nasvadi, Chhotaudepur and Kavant in comparison with Bodeli. It means the ASHAs belonging to Bodeli expressed an extreme level of barriers related to the selected aspects of Health Communication Strategies.

Further, the ASHAs with excellent occupational skills (85.6), having low knowledge (88.11) related to Health Communication Strategies and average media use (86.17) had reported a significantly high mean score of barriers than ASHAs with moderate occupational skills (79.90, p=0.024), high level of knowledge (79.38, p=0.017) regarding Health Communication Strategies and high media use (86.17, p=0.017) respectively. Concerning occupational skills and barriers related to Health Communication Strategies, it was found that the ASHAs with excellent occupations skills reported significantly more barriers.

The ASHAs with excellent occupational skills have reported for highly significant benefits of Health Communication Strategies, upon dissatisfaction on this aspect may have to lead them to their expressions on barriers related to Health Communication Strategies on a higher scale.

Knowledge about Health Communication Strategies and personal level media use to determine the scope and application of Health Communication Strategies in various situations of service delivery.

Low level of knowledge about Health Communication Strategies of ASHAs may have encountered them to more odds and therefore they would have experienced significantly higher barriers than those ASHAs with the high knowledge level of Health Communication Strategies as they would have been able to handle the odds very well.

Similarly, the ASHAs with an average level of personal media use may have significantly suffered from barriers to Health Communication Strategies. Viz, availability of Health Communication Strategies, handling Health Communication Strategies personally in front of beneficiaries *etc.*

However, it is important to note that mean scores were not found to be significant for the ASHAs with poor occupational skills, medium level of knowledge regarding Health Communication Strategies and fewer media use than their counterparts.

4.7.1.1 Barriers related to Features of Health Communication Strategies reported by the selected ASHAs.

Table 71

Intensity indices showing Barriers related to Features of Health Communication Strategies

Barriers related to features of Health Communication Strategies	I.I.
Lack of variety in strategies	3.4
Lack of local/regional visual representation	3.2
Insufficient strategies (quantity)	3.2
Too heavy to carry on the field	3.2
Poor quality of production (print and electronic)	3.2
Too large to handle alone on the field	3.2
Lack of continuity (coherence with other strategies of the same programme/topic)	3.1
Incomplete content	3.0
Lack of local terminologies/language	3.0
Inappropriate visual	2.9

The table 71 depicts item wise intensity indices for barriers related to features of Health Communication Strategies as responded by the ASHAs. It can be observed that the barriers related to features of Health Communication Strategies were rated as an extreme level of barriers.

The ASHAs faced barriers related to variety, language, quantity, weight (heaviness), production quality, coherence with other strategies, content and

language/local terminology. Highest among the list was lack of variety and the lowest was Inappropriate visuals.

Finding in the table 32 on the provision of Health Communication Strategies reflected that the ASHAs had limited provision and access to Health Communication Strategies for performing her assigned roles. They had limited varieties *i.e.* health care register and a diary. These create monotony in their work. The ASHAs are envisaged with multiple roles under NHM, which cannot be effectively performed with insufficient communication media. Language and visuals acted as extreme barriers dealing with largely less educated tribal communities having a typical tribal culture.

They also felt that visuals were inappropriate for the tribal communities and lack of local terminologies in Health Communication Strategies poised extreme barriers for the ASHAs.

The ASHAs reported that size and weight of media, restricted their mobility up to for plunge tribal areas. It can be read that poor production quality, lack of continuity with other strategies of the health programme were reported as extreme barriers.

4.7.1.2 Barriers related to Availability and Accessibility of Health Communication Strategies reported by the ASHAs.

Table 72

Intensity indices showing Barriers related to Availability and Accessibility of Health Communication Strategies

Barriers related to availability and Accessibility of Health Communication strategies	I.I.
Infrastructure resources (electricity, internet *etc.*) were in poor condition	3.6
Media/Strategies were not available on Time	3.6
Poor/lack of storage facilities for media/strategies	3.6
Media/Strategies were not accessible on Time	3.5
Infrastructure resources (electricity, internet *etc.*) were insufficient	3.5

Local Health bodies are responsible to provide necessary support and extend required logistics to the ASHAs for her service delivery as mentioned in NHM framework for implementation (2012-2017). Health Communication Strategies are an important support to the ASHAs for her role performance. Health Communication Strategies are important in this regard. However, data incurred from the ASHAs have surfaced the barriers related to availability and accessibility of Health Communication Strategies.

It can be derived from the table 72 that the high-intensity indices indicated extreme level of barriers in this section *viz.*, poor condition of infrastructure resources, timely unavailability, lack of storage facilities, timely inaccessibility, insufficient infrastructure hindering effective use of Health Communication Strategies.

The ASHAs reported that the electricity supply, internet connectivity and other infrastructure resources were in poor condition not maintained or managed in proper order and insufficient for the front-line Health care providers.

Supply chain management was very poor. Even their limited Health Communication Strategies *i.e.* ASHAs kit (*Mamta* Card, Diary, registers) were also not provided on time and in the required quantity. However, certain other media like TV, Projector *etc.* were not accessible when they wished to use them for the benefits of community people.

4.7.1.3 Barriers related to Support from Authorities (Doctors, ANM, AWW *etc.*) for use of Health Communication Strategies reported by the ASHAs.

Table 73

Intensity indices showing Barriers related to Support from Authorities (Doctors, ANM, AWW etc.) for use of Health Communication Strategies

Barriers related to support from Authorities (Doctors, ANM, AWW *etc.*) for use of Health Communication strategies	I.I.
Absence of motivation/incentives by authorities to use Health Communication Strategies on field	2.8
Absence of proper monitoring and evaluation system for usage of Health Communication Strategies	2.8
Lack of interest of seniors towards the usage of Health Communication Strategies	2.6
Indifferent attitude of seniors (Doctor, ANM, AWW *etc.*) towards the usage of Health Communication Strategies	2.6

The table 73 reveals that the ASHAs expressed a moderate level of barriers with regards to support from authorities for use of Health Communication Strategies. Moderate level of barriers was reported *viz.*, absence of motivation, absence of monitoring and evaluation, lack of interest of seniors and indifferent attitude of seniors towards the use of Health Communication Strategies while performing the prescribed duties.

The researcher found that there did not exist any IEC/BCC committee at the district level in Chhotaudepur to oversee communication activities. Although CDHO when interviewed, sounded enthusiastic towards promoting behaviour change and health benefits through proper Health Communication Strategies, there existed lacuna among other authorities like doctors, ANM and AWW.

4.7.1.4 Barriers related to Characteristics of Beneficiaries for use of Health Communication Strategies reported by the ASHAs.

Table 74

Intensity indices showing Barriers related to Characteristics of Beneficiaries for use of Health Communication Strategies

Barriers related to Characteristics of Beneficiaries for use of Health Communication Strategies	I.I.
Poor response of beneficiaries towards Health Communication Strategies	3.1
Heterogeneity amongst beneficiaries becomes hindrance while using Health Communication Strategies	3.1
Indifferent attitude of beneficiaries towards Health Communication Strategies	3.0

It is seen from the table 74 that the barriers related to characteristics of beneficiaries have affected the use of Health Communication Strategies to the great extent to the selected ASHAs. The poor response, heterogeneity amongst beneficiaries and their indifferent attitude towards the use of Health Communication Strategies were reported as an extreme level of barriers.

Beneficiaries are the ultimate aim of any health communication activities for successful health promotion and bringing desirable behaviour change in health practices, the involvement of end uses is crucial. In the present research, beneficiaries constituted the majority of the tribal population who remained inactive and possessed an indifferent attitude towards Health Communication Strategies.

Their heterogeneity may be with regards to their education, interest and lifestyle had been an extreme level of barriers for the ASHAs while using Health Communication Strategies.

Health promotional activities through various media like print, electronic and folk were left to less priority list.

In this scenario, the ASHAs felt that they did not get any motivation/incentives for using Health Communication Strategies on the field and also there is no robust system to check, monitor and evaluate their use of Health Communication Strategies.

4.7.1.5 Barriers related to Personal (ASHA) characteristics for Use of Health Communication Strategies reported by the ASHAs.

Table 75

Intensity indices showing Barriers related to Personal (ASHA) Characteristics for use of Health Communication Strategies

Barriers related to Personal (ASHA) Characteristics for use of Health Communication Strategies	I.I.
Smartphone/ mobile phone handsets were not provided by the government under NHM Unavailability of Mobile/smartphone handsets	3.7
Identity crisis (poor status of ASHA under NHM health care system)	3.5
Unavailability of transportation facility	3.5
Lack of available time to use Health communication strategies due to overburden of work	3.4
Absence of training for preparation of Health communication strategies	3.3
Absence of training for use of Health communication strategies on the field	3.3
Absence of training for storage of Health communication strategies	3.2

Table 75 reflects that the selected ASHAs faced an extreme level of barriers at a personal level due to their characteristics like unavailability of mobile handsets, identity crisis due to poor status under NHM health care system, unavailability of transport facility, lack of time due to overburden of work, absence of training for preparation, use and storage of Health Communication Strategies.

It is observed in preceding sections that mobile phones were highly used communication technology after the ASHA kit (*Mamta* Card, ASHAs diary &

Registered). Which was also perceived as a highly effective medium of Health communication, but basic mobile is provided to only some of the ASHAs (31.9 %).

Moreover, at the time of data collection, FHWs were provided with the smartphone under NHM. So, in totality, they identify unavailability of the smartphone as an extreme level of a barrier.

ASHAs are envisaged as grass root level health activists and they are at the base of the pyramid of health care machinery. They have been assigned multiple roles like a service provider, link worker and health activists. They are the volunteers and not the employee on roll-call of National Health Mission. (Ministry of Health and Family welfare, 2013) Therefore, they might have experienced identity crises under NHM.

Their multiple roles have made their job overburdened and there was no fixed time, they were required to be available 24 x 7 for any health emergency or requirement of their services. This might be reasons for the lack of available time for the use of Health Communication Strategies.

ASHAs did not have any provision for transport facility except in case of calling emergency ambulance '108' and returning home after delivery of a baby from hospital to home. She had to walk up to all households and health facilities and whenever required she had to hire or manage vehicle and bear the cost on her own. Therefore, unavailability of transportation facility was reported as an extreme barrier by the ASHAs.

Without training on certain aspects, an individual will not be able to perform the task efficiently. The ASHAs reflected that they had not been trained for preparation, use and storage of varieties of Health Communication Strategies.

Their training was limited to various soft skills which did not include a component of Health Communication Strategies, which may have resulted in them to report training on preparation, use and storage as an extreme level of barriers. Therefore, training on Health Communication Strategies should be planned and given to ASHAs to build her capacities.

4.7.2 Responses of the ASHAs during FGDs to Barriers related to Health Communication Strategies

In the Focused Group Discussions, ASHAs were asked about the **barriers if they face related to Health Communication** in their work. From the review of the transcriptions, two major issues were reflected in the responses *i.e.* **barriers related to features of Health Communication Strategies** and **characteristics of beneficiaries for use of Health Communication Strategies**. Their verbatims are enlisted in the following classified boxes.

4.7.2.1 Responses of the ASHAs to Barriers related to Features of Health Communication Strategies.

Box 17

Verbatims of the ASHAs on Barriers related to Features of Health Communication Strategies

Barriers related to Features of Health Communication Strategies reported by the ASHAs
'અમે સ્પીકર ચોંટાડે તો છોકરાઓ ફાળી કાઢે. એના કરતા કલરથી ચિત્ર કર્યુ હોય તો સારું રહે.' *(Children tore out the posters which we paste on the wall (public places)*
'અમારા ગામડામાં અમારી ભાષામાં સમજાઈએ તો સારું.' *(Villagers would understand better if local terminologies and easy language are used.)*
મમતા કાર્ડ નવા આવ્યા છે તેમાં તારીખ નાખતા અઘરું પડે છે, કોલમ એકદમ નાના છે.' *(newly launched Mamta card (health-card) is comparatively smaller than the earlier one. It becomes difficult to enter even date into it.)*
'નવા મમતા કાર્ડની સાઈઝ બહુ નાની છે અને દેખાવ રેશન કાર્ડ અને પાસુક જેવો છે, ક્યાંય ખોવાઈ જાય તો ખબર પણ ન પડે.' *(New Mamta card is very small, due to its appearance and look it gets mixed up with ration card and bank passbooks, there are high chances of getting it lost.)*

'કામ વધતુ જાય છે, તેઓ કહે કે બધુ આશા બેને કરવાનું છે.'

(Work keeps on increasing, they (officers) insist us to do everything in the village.)

The ASHAs reflected upon barriers they face related to the implementation of Health Communication Strategies. Villagers, especially children tear posters/charts pasted on walls.

They represented their concern for use of local words/terminologies in the media prepared for Tribal people of their area. They emphasised upon it by saying,

'અમારા ગામડામાં અમારી ભાષામાં સમજાઈએ તો સારું.'

(Villagers would understand better if local terminologies and easy language are used.)

Moreover, while discussing pictures and graphics used in health communication media it was reported that present Chart/Poster/wall painting *etc.* lacked in local tribal representation with regards to graphics, pictures, local terminologies *etc.* These all factors act as barriers for the ASHAs while using such media with tribal people.

Therefore, local representation was emphasised for bringing better concept clarity and easy association with personal level health concerns.

Another barrier was observed in the discussion regarding the size of the *Mamta* card. The previous *Mamta* card given was sufficiently bigger and appropriate to enter records in it. But the revised *Mamta* card is smaller comparatively. Entering information is quite difficult and chances of losing the *Mamta* card by mothers are high as its look is almost similar to ration card and bank passbook.

There existed mixed responses for the *Mamta* card (health cards). Some of them inhibited risk for losing it due to its size and appearance. They experienced difficulty in entering details into it. They were in favour of earlier cards with comparative larger size with large pictures and more space to write details. However, some of them favoured small-sized *Mamta* card as it can be accommodated even in a small purse.

Overburdening workload was mentioned as an extreme level of a barrier by the ASHAs, which limit this use of Health Communication Strategies. To quote the ASHAs,

> *'કામ વધતુ જાય છે, તેઓ કહે કે બધુ આશા બેને કરવાનું છે.'*
> (Work keeps on increasing, they (officers) insist us to do everything in the village.)

It was deliberated by the ASHAs that for any and everything targeting villagers (other than prescribed roles under ASHAs programmes) officers approach to the local ASHA and remain dependent on them only. Even though they were not salaried staff. The ASHA is primarily the grass-root level health activist but in reality, they were expected to do too much of other jobs which leads to somewhere compromise on her actual health promotional and behaviour change activities through using appropriate Health Communication Strategies.

ASHAs were asked about the challenges they faced during the Health Communication Strategies implementation in their allocated villages. They responded that they were provided posters and leaflets about health-related issues of women which they use to communicate with people. They realised that the pictures on the posters and leaflets were outdated, torn and it was difficult to relate with the women of the villages. Also, the posters were in *Hindi or Gujarati* language, which is slightly different from the local language they use in daily communication. Hence, they suggested that it would be good if they get posters and handbooks in the local language.

The National Health Mission (NHM) provided posters and facilitated wall paintings to be made on the external wall of Anganwadi for the awareness of people, were less in number. They emphasised that more such posters and wall paintings need to be put up everywhere in the village such as school, panchayat office, dairy *etc.*,

Further, ASHAs also showed concern that the posters with glue do not sustain for a longer period on the wall or sometimes children tore them. Hence, painting the same picture and content on the wall was suggested by them for more durability and visibility.

Although the investigator took enough precautions for not to get the discussion diverted towards payments (remunerations) made to the ASHAs for their work. But in all the blocks during FGDs, ASHAs unanimously with unsatisfied tone raised their voice for their remuneration. They all reported their payment as a barrier or hurdle.

'કામ વધતુ રહે છે પણ પગાર નથી વધતો.'

(work is increasing day by day, but not the salary/incentives)

It was expressed intensely during the interaction, that most of the ASHAs do their work with full commitment, they were paid very less and they were overloaded with work. They put up their demand for pay-fixation and an increase in their monthly income. They added that payment of remuneration was very irregular and uncertain and Government should resolve their issue. However, as per Vickey (17, October 2017), Oneindia.com, 'Following the approval of the 7th Pay Commission, the Gujarat government announced a 50 per cent salary hike for Accredited Social Health Activist (ASHA) workers in the state.' It might be they were still not paid as per 7th Pay Commission.

'ગામમાં સરકારી યોજના કે કંઇ પણ નવો પ્રોગ્રામ આવે એટલે, અધિકારીઓ તરત જ આશા બહેનને બોલાવો એવું કહે છે.'

(any new government programme or scheme launched in the village; officers would always call us.)

Many ASHAs shared that they need to be ready at any time of the day for the call from the village people. They did not have fixed timings of work or a holiday in this work. They shared incidences where they had to live with a pregnant woman in the hospital for 3-4 days. (A few of the ASHAs had to take brunt from their families for staying away from their home.)

Inadequate resources were also realized the crucial concern by the ASHAs, ASHA Facilitators and FHWs especially for ASHA diaries, *Mamta* cards and Registers. Moreover, the number of flipbooks, posters were not sufficient for all ASHAs. Besides these, electricity issues were found in some of the *Aanganwadis*.

Verbatims of the ASHAs on Barriers related to Characteristics of Beneficiaries for use of Health Communication Strategies

4.7.2.2 Responses of the ASHAs to Barriers related to Characteristics of Beneficiaries for use of Health Communication Strategies.

Box 18

Verbatims of the ASHAs on Barriers related to Characteristics of Beneficiaries for use of Health Communication Strategies

Barriers related to Characteristics of Beneficiaries for use of Health Communication Strategies reported by the ASHAs
'કુટુંબવાળા સહકાર ન આપે, અમે મીટીંગ માટે બોલાવવા જઈએ તો આવા ના દે.' *(Families did not allow (their daughter-in-law and kids) to come for meeting even after repeated reminders.)*
'લાભાર્થીઓ આવે નહિં અને જો આવે તો અમે કંઇ (મીડિયા) બતાવીને વાત કરીએ તો પણ રસ ન લે. અમુક લોકો હજી જુની માન્યતામાં માને છે.' *(Beneficiaries if they come (for a meeting), they do not take interest even if we show them some media to explain some families (in the interior) area still follow old traditional customs and myths.)*
'હાલમાં પણ અમુક ઘરોમાં અંધશ્રદ્ધા પાળે છે કે મને હજી સુધી કંઇ નથી થયુ તો મારા બાળકને પણ કંઇ નહીં થાય.તો રસી મુકાવી જરુરી નથી.' *(In recent time also in some families black magic and myths are prevalent. On our face, they say that if I am alive without any vaccination then nothing will happen to my kids. Therefore, the vaccine is not required for my kids.)*
'કોઇ બહેનને તારીખ ન પણ ખબર હોય-કોઇ તહેવાર યાદ રાખે. આ બધામાં આપણે શોધવું પડે.' *(Women many a time don't even remember their LMP, they give some reference like Agiyars, no moon day, some festival etc. It becomes a task for me to find out from there.)*

'પહેલા અમુક બહેનો અમે કહેવા જઈએ તો માનતા નથી. જેમ કે પોલીઓનું ટીક કરવા જઈએ એ નથી કરવા દેતા. કેમ કે એમની દિવાલ ખરાબ થઈ જાય.'

(We were not allowed to put the sign on their door or exterior wall regarding Polio vaccination. They didn't come for vaccination even after repeated reminders.)

Some of the ASHAs reported that families were not cooperative when they were called for meetings at Aanganwadi also were not ready for vaccination of their kids and pregnant women of their family.

'Women do not even remember their LMP (Last Menstrual Period) date.' – As expressed by the ASHAs in a depressing tone.

This means women remain ignorant and less concerned about their reproductive health. They still follow certain myths and wrong beliefs. Reluctant behaviour was a major barrier in the community which hinder behaviour change, availing health benefits and improving the overall health status of a community. ASHAs shared that sometimes people do not come for vaccination for their child due to their superstitions that child will get sick, also while sterilization campaign, many people had religious beliefs and so they refuse to participate.

Families did not allow to write/paint, put up a poster on exterior walls of their house not even simple small sign of polio vaccination done for the household. Therefore, the ASHAs expressed that this kind of experiences with beneficiaries lowered their interest in using Health Communication Strategies.

4.7.3 Responses of the ASHA Facilitators during FGDs to Barriers related to Health Communication Strategies

Thematic analysis of the responses of ASHA facilitators emerged two trends of findings viz, barriers related to **characteristics of Health Communication Strategies** and **characteristics of beneficiaries for use of Health Communication Strategies**, which are listed and described in the following boxes and paragraphs.

Theme	Sub-themes
Barriers related to Health Communication strategies	Characteristics of Health Communication Strategies
	Characteristics of beneficiaries for use of Health Communication Strategies

4.7.3.1 Responses of the ASHA Facilitators to Barriers related to Characteristics of Health Communication Strategies.

Box 19

Verbatims of the ASHA Facilitators on Barriers related to Characteristics of Health Communication Strategies

Barriers related to Characteristics of Health Communication Strategies reported by the ASHA Facilitators
લાઈટ ન હોવી, નેટવર્ક ના પકડાતુ હોય.' *(Power-cut off, poor network connectivity- are the major problems)*
'હજી સુધી નવી ડાયરી કે રજીસ્ટર મળ્યો નથી અમે બધી નોંધણી ચોપડા કે ડાયરીમાં કરીએ છે.' *(For such a long time we have not received ASHA diary or registers…we purchased notebooks/diary on our own)*
'નવા મમતા કાર્ડમાં મમતા-બાળક નું ચિત્ર નથી એટલે એ પહેલા જેવું આકર્ષક નથી લાગતું.' *(New design of Mamta card is not appealing since it does not have a picture of Mother-Child on the cover page.)*

'આશા બહેનોને યુનિફોર્મ અને આશા કીટ આપેલી છે અને એફ.એચ.ડબ્લ્યુ. ને પણ યુનિફોર્મ અને ટેક્નો મોબાઈલ.. અમારી પાસે આવુ કંઈ નથી.'

(ASHAs are provided with a uniform and ASHA kit and similarly, FHWs have a uniform and TeCHO mobile. They have not given any such support to us.)

Majority of ASHA facilitators faced problems related to power-cut off and poor mobile network connectivity. It has frequently happened in some of the interior village areas. They faced problems in contacting doctor, ambulance or family due to poor connectivity of mobile coverage.

Majority of them had dissatisfaction on regular and sufficient supply of *Mamta* card, ASHA diary and registers, therefore they had to manage on their own and maintain all the records. They reported their dissatisfaction by,

'હજી સુધી નવી ડાયરી કે રજીસ્ટર મળ્યો નથી અમે બધી નોંધણી ચોપડા કે ડાયરીમાં કરીએ છે.'

(for such long time we have not received ASHA diary or registers…we purchase notebooks/diary on our own)

Some of them were not satisfied with the new design of *Mamta* card. They expressed that earlier, *Mamta* card had a picture of mother and child, now they come in orange cover, due to which mother's picture is not visible.

'નવા મમતા કાર્ડમાં મમતા-બાળક નું ચિત્ર નથી એટલે એ પહેલા જેવું આકર્ષક નથી લાગતું.'

(New design of Mamta card is not appealing since it does not have any pictures of Mother-Child on the cover page.)

Moreover, they reported about problem-related to the timing of SATCOM programmes. According to ASHA Facilitators from Chhotaudepur, the timing of SATCOM program clashes with the timings of the vaccinations on Tuesdays so they cannot watch at all and suggested for changes in the days of broadcast.

The majority of the ASHA Facilitators in all six blocks expressed on the unavailability of uniform, ASHA kit and TeCHO mobile in a complaining tone,

'આશા બહેનોને યુનિફોર્મ અને આશા કીટ આપેલી છે અને એફ.એચ.ડબ્લ્યુ. ને પણ યુનિફોર્મ અને ટેક્નો મોબાઈલ.. અમારી પાસે આવુ કંઈ નથી.'

(ASHAs are provided with a uniform and ASHA kit and similarly, FHWs have a uniform and TeCHO mobile. They have not given any such support to us.)

This means that the Facilitators were deprived of uniform which helps in creating identity amongst beneficiaries and health department. Since they were not provided with ASHA Diary, registers nor TeCHO mobile, they faced difficulty in performing her roles during a home visit, record keeping and sharing them with FHWs.

4.7.3.2 Responses of the ASHA Facilitators to Barriers related to Characteristics of beneficiaries for use of Health Communication Strategies.

Box 20

Verbatims of the ASHA Facilitators on Characteristics of Beneficiaries for use of Health Communication Strategies

Barriers related to Characteristics of Beneficiaries for use of Health Communication Strategies reported by the ASHA Facilitators
'ઘણી વાર સાસુ ના મોકલે એની જ જોખમી માતાને, એમ કહે ... બેસી રહે છાની-માની, મીટીંગમાં નહીં જવાનું, કશુ થવાનું નથી તને.' *(Many a time mother-in-law would restrict high-risk mother for attending a meeting (on Mamta day/counselling session) by saying sit quietly at home, nothing wrong will happen to you...)*
'અંધશ્રદ્ધા હોય છે.' *(There prevails superstition/myths and taboos in society.)*
'અમુક ટાઈમ ખેતરમાં જતા હોય.' *(they attend to farm labour first.)*
'અમુક માતાઓ મમતા દિવસે પોતાના બાળક લઈને પણ નથી આવતા કહે છે કે - અમારું બાળક મોટુ થઈ જ જવાનું છે.' *(Some mothers do not bring their child on Mamta day they (remain very casual) 'in any case/way my kid will grow.)*

ASHA Facilitators shared that some people still follow superstitions and myths. They (in-laws) restrict their daughter-in-law for seeking health care and going to health facilities.

They did not allow treatment of high-risk mother; vaccination of children. Even when they come for the first dose then in case of fever, they do not complete the next dose. Parents due to their pre-occupied farm work and also due to migration miss on the complete dose of vaccination. It was also reported that parents in their area were ignorant towards illness and poor health of their child, they were not much bothered about it.

ASHA Facilitators shared that some parents did not take their children to hospital due to their belief that the child would not be cured. A case of flat foot child was shared, whose mother lost hope; while ASHA Facilitators, encouraged her to visit a hospital and after treatment, the child got perfectly fine and began to walk properly. One of the ASHA Facilitators shared that they always maintained the confidentiality of a patient otherwise community people may reject them(patients) from many social gathering and special occasions. So, in some part of the district, rigid social mentality still prevails.

4.7.4 Responses of the Female Health Workers during FGDs to Barriers related to Health Communication Strategies

Female Health Workers were asked about Barriers they might have faced related Health Communication Strategies in Chhotaudepur. Their responses were analysed and two themes have emerged. Their responses are listed as verbatims and described in this section.

4.7.4.1 Responses of the Female Health Workers to Barriers related to Characteristics of Health Communication Strategies.

Box 21

Verbatims of the Female Health Workers on Barriers related to Characteristics of Health Communication Strategies

Barriers related to Characteristics of Health Communication Strategies by the Female Health Workers
'માધ્યમોમાં સૌથી વધારે પ્રોબ્લમ ટેક્નોલોજીમાં આવે છે.' *(Maximum barrier we face are related to-Technology)*
'અમારી પાસે સ્માર્ટ ફોન, ઈ-મમતા પોર્ટલ, ટેક્નો મોબાઈલ છે. પરંતુ બધાજ રેકોર્ડ રજીસ્ટર માં પણ લખવા પડે છે.' *(we have smartphone, E-Mamta portal and TeCHO mobiles for a digital record but then also we have to maintain them in registers manually.)*
'રજીસ્ટર ટાઈમ પર એટલા આવતા નથી પુરા, એક થી આઠ.' *(supply of all (1-8 number) register is very poor and insufficient.)*

FHWs reflected on challenges concerning TeCHO mobiles. They expressed that,

'માધ્યમોમાં સૌથી વધારે પ્રોબ્લમ ટેક્નોલોજીમાં આવે છે.'

(Maximum barrier we face are related to-Technology)

There were teething troubles encountered during operating it. There were mixed and contradictory responses amongst the group of FHWs regarding various modes of data entry, record keeping and Health Management Information System (HMIS).

Some of them reported that with regards to maintaining manual records (register), E-*Mamta* portal and now recently TeCHO mobile have made their task repetitive, tedious and hence overloaded. They found it difficult in maintaining the records for DPT and PENTA vaccines for a child and such other details for the family in it. Although the TeCHO application was operated in entire state, there were problems in maintaining details of migrant families within the state across the district.

FHWs mentioned about the repetition of details at three places *i.e.* register, E-*Mamta* portal and TeCHO mobiles. They suggested that a decision should be taken fast and anyone format for data entry should be adopted. They stated the need for separate register for number four and five.

According to FHWs, they faced difficulty especially in case of emergency due to network issues, and so they had to keep registers that consume more time as compared to the phone.

FHWs shared that in TeCHO mobile if due to any technical reason they could not log in for the day, this information was sent to Gandhinagar, for which they would be required to give explain to officers. The smartphone enables the health department to keep a track of the real-time location of each FHW and the data filled in by her about health aspects *i.e.* ANC, PNC, Vaccination, fertile couples, leprosy cases *etc.*

FHWs explained elaborately about the problems they face with the TeCHO mobile like data entry for vaccines, migrant families, retrieval of data, maintaining their home visit schedule *etc.* This needs to be resolved on an urgent basis since its repercussions are many folds.

A high majority of the FHWs expressed their concern regarding the supply of registers to be on time and in sufficient quantity for all 1-8 number registers.

4.7.4.2 Responses of the Female Health Workers to Barriers related to Characteristics of Beneficiaries for Use of Health Communication Strategies.

Box 22

Verbatims by the Female Health Workers on Barriers related to Characteristics of Beneficiaries for Use of Health Communication Strategies

Barriers related to Characteristics of Beneficiaries for Use of Health Communication Strategies by the Female Health Workers
'લોકોમાં આરોગ્યને લગતી ગૈરમાન્યતાઓ બહુ છે.' *(There prevail superstitions and myths about health among villagers)*
'સ્વાસ્થ માટે રસ ના હોય અને જીદ્દી પણ હોય.' *(Ignorance and reluctant behaviour towards health- among beneficiaries.)*
'કુટુંબ બીજા ગામ જતુ રહે ... તો ટેકો માં એની એન્ટ્રી ટ્રાન્સફર નથી થતી.' *(Migration of family and maintaining their records is a barrier. Data is not transferred to TeCHO.)*
'મારા હાથ હેઠળ ઘણા વસાહત છે જેમાં એમ.પી. વિસ્તારની મહિલાઓ હોવાથી તેની સાથે વાતચીત કરવામાં બહુ મુશ્કેલી પડે છે.' *(In my allotted area in many communities/colonies families have come from Madhya Pradesh. It becomes so difficult to communicate with them. Language becomes the barrier.)*

FHW shared the difficulty they faced to deal with the people with religious beliefs, who did not get agree to them and did not allow them to visit their place, even after calling them for *Mamta* divas and giving explanation about vaccination, examples of other children still they did not get convinced, not even allow them to write details in a register. When FHW recorded information in TeCHO mobile, some beneficiaries expect and inquire about monetary benefits they would get after providing information.

ASHA Facilitators and FHWs Initially used to put ASHA's number in the case when the beneficiary's family did not possess own contact number for any health records. But then TeCHO system did not allow to enter ASHA's number repetitively. So, in that case, they added the number of the beneficiaries' neighbour, who might not be aware of any health-related details like vaccination, ANC *etc.* When Higher authorities from Gandhinagar called to check with the status of vaccine or any other health-related benefits, the neighbour would not be aware and might give the wrong answer. In such a situation, blame came on grass root level health care workers *i.e.* ASHA, ASHA facilitator and Female Health Worker. So, after narrating this whole situation they suggested to take out a technical solution for the smooth functioning of TeCHO-mobile.

Discussion:

Major findings revealed that majority of the selected ASHAs faced barriers to a moderate extent, however, intensity indices reflected that they faced barriers to an extreme level (great extent) related to availability, features, accessibility, personal and beneficiaries' characteristics while using Health Communication Strategies. In previous sections of 'Provision and Use of Health Communication Strategies,' it is mentioned that the ASHAs were provided with limited resources. It is important to note that within limited provision they performed all assigned tasks.

It was found that the ASHAs belonging to Bodeli block, with excellent occupational skills, low knowledge regarding Health Communication Strategies and Moderate level of personal media use, faced significantly more barriers than their counterparts. They were also found to have a high level of perception towards the benefits of Health Communication Strategies. This means they expect more from such health-promoting activities. When their expectations are not fulfilled because of any reason they probably have reported barriers to a great extent.

Further, it can be inferred that the ASHAs with excellent Occupational skills may be very well aware of her role performance effectively using more Health Communication Strategies, any situation adverse to it may lead to internal conflicts

and dissatisfaction. Therefore, they face more barriers. Kaur et al. (2017) in their study found that 'inadequate capacity building, poor record-keeping and reporting had an adverse effect on the performance of *Sakshar Mahila Smooh* (SMS) in some of the districts'

It is very clear that person with low knowledge about Health Communication Strategies would tend to face a high level of barriers. Such ignorant ASHA would not be able to harness maximum benefits of Health Communication Strategies.

The ASHAs whose personal media use was moderate may be experimenting with the use of Health Communication Strategies on the field. While doing so, they might have faced more barriers related to it and therefore they would have expressed barriers related to Health Communication Strategies significantly more than their counterparts.

Chib et al. (2012) in their study documented that 'beyond basic access issues, infrastructural, social, technological and economical barriers to mobile phone adoption existed.' According to Murthy and Vijayraman (2012), heavy workload and Nkanynye and Obiechina (2017) low health literacy and poor communication were the barriers before Health Workers.

So, if the supply of resources (ASHA diary, *Mamta* card *etc.*) are not made available on time then it becomes a major cause of concern for Programme and Policy planners. Thakur et al. (2017) concluded that 'IEC/BCC/HP is a neglected area in national health programmes in the selected districts with an inadequate budget, human resources with poor implementation and requires strengthening for better implementation of the national health programmes. In Ambala district, the absence of a structured reporting was observed, the only number of group meeting was reported without any detail information or minutes. The low morale of programme officers and lack of importance given to the IEC component in the programme was a threat.' Kaur et al. (2017), suggested 'better planning and monitoring can improve programme performance.'

Beneficiaries are the actual target of all health programmes. Their openness, readiness and acceptance for betterment are crucial ingredients of successful Health

Communication activities. It was reflected by the ASHAs, ASHA Facilitators and Female Health Workers as a barrier, that some of the beneficiaries remained reluctant and follow wrong beliefs, which acted as a major challenge before them for flawless implementation of Health Communication Strategies.

Following researches are remotely related; Arya (2016) documented statement of ASHA 'lack of community participation as major constraints in the effective delivery of health and nutrition messages. There is a need to equip ASHAs with required skills in leading community meeting for awareness as give training on handling computer, cell phone *etc.*' Haq and Hafeez (2009) observed that Local Health Workers in Pakistan faced difficulties in dealing with male members about Family Planning Programmes.

Only barriers related to authorities were found to have intensity at a moderate level. This may be due to ASHAs' respect towards higher authorities and officers or maybe they are afraid of expressing their real feeling about their superiors.
Officers should act as a motivating force to ASHA, who work tirelessly for delivering health services.

ASHA facilitators reflected upon certain barriers with regards to infrastructure *i.e.* electricity supply, network coverage and social dynamics like superstitions and myths. During FGDs they expressed needs related to Health Communication Strategies, specifically additional strategies and training needs. They explained that they are the only group who are not given any uniform.

Female Health Workers expressed their barriers with regards to duplication of data entry in registers, e-*Mamta* and TeCHO mobile. They faced teething problems in TeCHO mobile for vaccination module and details of family migrants, which they requested to look into it and resolve.

Hazra (2017) also noted that communication training for health workers is a major limitation of the programmes. Lack of motivated employees, reaching the target on their convenience and environment hurdles are major threats for rural health. A good rural community health policy suffers due to bad implementation.

Overall Findings in barrier section indicate that the ASHAs, ASHA Facilitators and Female Health Workers need to be supported well in process of overcoming all sorts of barriers *viz.* features, availability and accessibility of Health Communication Strategies, personal level barriers and barriers related to beneficiaries. The policy planners, media practitioners, NGOs consultants and other stakeholders need to be involved in rigorous planning, execution and monitoring of strategies Health Communication Strategies. This process should overcome a limited variety, size, local representation through visual and terminologies.

The ASHAs, ASHA Facilitators and Female Health Workers need to be trained for effective use of Health Communication Strategies and encouraged by seniors to use them frequently.

Findings highlighted requirements to build and maintain the accessibility of proper infrastructure facilities like electricity, building, TV, internet *etc.* to overcome barriers for the front-line health workers.

According to the researcher, support and motivation from authorities besides systematic monitoring and evaluation for use of Health Communication Strategies is most critical for effective Health Communication process which is mainly missing in Chhotaudepur. In absence of proper supervision, monitoring and evaluation, the ASHAs would not be able to utilize Health Communication Strategies at its utmost potential, therefore, IEC committee and or supervisor should be responsible to control barriers in this regard. They should prepare ASHA Facilitators on these aspects and Female Health Workers can also be involved in the process of monitoring the use of Health Communication Strategies.

4.8 Need of Additional Health Communication Strategies

4.8.1 Need of Additional Health Communication Strategies expressed by the ASHAs

The ASHAs under study reported that they have not received any specific training related to Health Communication. However, under module-5 of training has included a topic of 'Occupational skills', in which they were trained for selected soft skills to like; Coordination, leadership, communication, negotiation and decision-making skills.

During the survey, ASHAs were further asked about their various needs related to training and additional Health Communication Strategies for performing their duties during five activities. Following pages throws light upon their needs in this regard.

Table 76

Distribution of the ASHAs according to Readiness for Specific Components of Training related to Health Communication in future **n=326***

Components of training related to Health Communication	f	%
Use of Health Communication Strategies	236	72.4
Importance of Health Communication	209	64.1
Types of Health Communication Strategies	199	61.0
Storage of Health Communication Strategies	193	59.2
Production techniques of Health Communication Strategies	192	58.9

***Multiple responses**

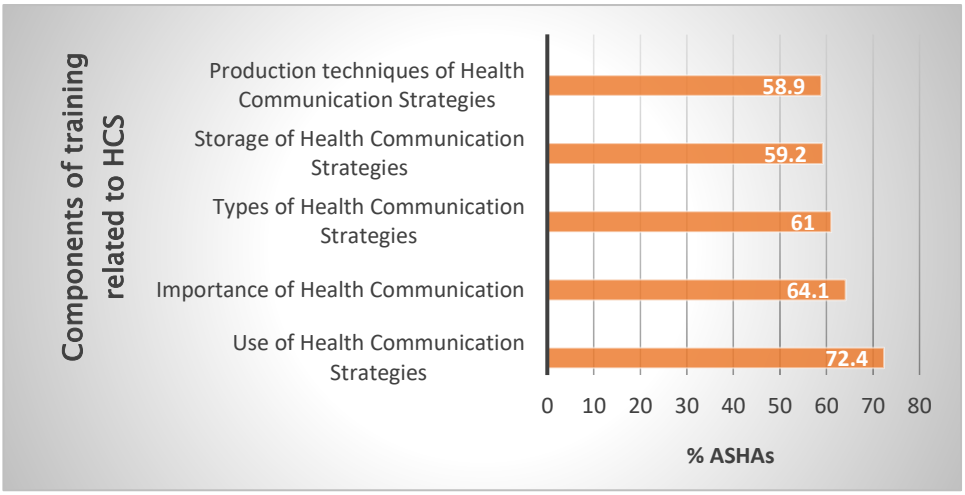
Further, it is seen from table 76, the ASHAs had shown their readiness in receiving training related to the following aspects of Health Communication, *i.e.*

- Use of Health Communication Strategies (72.4%)
- Importance of Health Communication (64.1%)
- Types of Health Communication Strategies (61.0%)

- Storage (59.2%) and production techniques (58.9%) of Health Communication Strategies

Figure 42

Distribution of the ASHAs according to Readiness for Specific Components of Training related to Health Communication in future **n=326***



***Multiple responses**

Shrivastava and Srivastava (2016) stressed on investing more towards developing and implementing training modules for capacity building of ASHAs with special reference to health communication.

Table 77

Distribution of the ASHAs according to Most Expressed Need of Additional Health Communication Strategies **n=326**

Need of Additional Health Communication Strategies	f	%
Planning and celebrating VHND (*Mamta day*)	154	47.2
Home visit	113	34.6
Visit Health Facilities	28	8.5
Village Health Plan Meeting	17	5.2
Keeping and informing about records	14	4.2

Table 77 reflects that nearly half of the ASHAs (47.2%) expressed the need for Health Communication Strategies for planning and celebration of Village Health and Nutrition Day (VHND) popularly known as *Mamta day*, which is followed by 34.6 % for a Home visit during which personal counselling and knowledge about the disease, diet, new schemes and better health practices are provided to the beneficiaries.

Moreover, very few of the ASHAs (8.5%) felt that they should be provided with more media for planning their visit to health facilities and more opportunity for health promotion activities during their visit to health institutes. Least demand was expressed for Health Communication Strategies for 'keeping and informing about records' to concerned officers among their all activities.

Table 78

Categorisation of ASHAs according to Overall Need of Additional Health Communication Strategies **n=326**

Overall Need of Additional Health Communication Strategies	f	%
More Overall Need	132	40.5
Less Overall Need	194	59.5

It is clear from the table 78 that majority (59.5%) needed less number of additional Health Communication Strategies, whereas their counterparts (40.5%) expressed that they required more number of Health Communication Strategies to facilitate their work.

Variable wise Differences in Overall Need of Additional Health Communication Strategies

Table 79

t-test showing variable wise differences in Overall Need of Additional Health Communication Strategies **n=326**

Variable	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	44.67	25.68	0.40	0.687	NS
	Older	180	43.57	23.53	0.40		
Work Experience	Less Work Experience	116	43.51	24.42	0.30	0.761	NS
	More Work Experience	210	44.37	24.57	0.30		
Training	Partially Trained	34	38.7	18.9	1.3	0.178	NS
	Completely Trained	292	44.7	25.0	1.7		

***p<0.05, NS- Not Significant**

Table 79 reflects that age, work experience and training under NHM did not make any difference in the overall Need of Additional Health Communication Strategies by the ASHAs. Therefore, null hypotheses stating that there will be no significant differences in the overall need of additional Health Communication Strategies according to age, work experience and training under NHM were accepted.

Table 80

Analysis of Variance (ANOVA) showing variable wise differences in Overall Need of Additional Health Communication Strategies **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-Value	*p*-Value	Remarks
Block	Between Groups	20316.7	5	4063.3			
	Within Groups	174519.8	320	545.4	7.5	0.00*	**Significant**
Educational Qualification	Between Groups	3123.3	3	1041.1			
	Within Groups	191713.2	322	595.4	1.7	0.16	NS
Occupational Skills	Between Groups	11050.7	2	5525.3			
	Within Groups	183785.9	323	569.0	9.7	0.00*	**Significant**
Knowledge regarding HCS	Between Groups	3809.7	2	1904.8			
	Within Groups	191026.9	323	591.4	3.2	0.04*	**Significant**
Media use	Between Groups	1112.8	2	556.4			
	Within Groups	193723.7	323	599.8	0.9	0.40	NS

***p<0.05, NS- Not Significant**

It can be seen from the table 80 that educational skills and media use did not make any difference in the overall Need of Additional Health Communication Strategies by the ASHAs. Therefore, null hypotheses stating that there will be no significant differences in the overall need of additional Health Communication Strategies according to educational skills and media use were accepted.

Further, table 80 shows that block, occupational skills and knowledge regarding Health Communication Strategies had differences on the overall need of additional Health Communication Strategies by the ASHAs. Therefore, null hypotheses stating that there will be no significant differences in the overall need of

additional Health Communication Strategies according to block, occupational skills and knowledge regarding Health Communication Strategies were not accepted.

Table 81

Tukey's HSD comparison for Overall Need of Additional Health Communication Strategies with Block and Occupational Skill **n=326**

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig.
Block	Nasvadi $\overline{x}$= 59.95	Chotaudepur $\overline{x}$= 34.01	25.93246*	4.81688	.000
		Sankheda $\overline{x}$= 50.29	9.65175	4.81688	.342
		Bodeli $\overline{x}$= 45.72	14.23000*	4.95397	.049
		Pavi Jetpur $\overline{x}$= 40.55	19.39286*	4.62876	.001
		Kavant $\overline{x}$= 39.15	20.80000*	4.91145	.000
Occupational skill	Excellent $\overline{x}$= 49.81	Moderate $\overline{x}$= 37.31	12.49906*	2.83687	.000
		Poor $\overline{x}$=43.73	6.08120	4.18914	.316
Knowledge regarding HCS	Low $\overline{x}$=50.82	Medium $\overline{x}$=44.09	6.73503	3.81709	.183
		High $\overline{x}$=40.05	10.77299*	4.24482	.031

***p<0.05**

Table 81 depicts that highly significant mean differences were found amongst categories of the block, occupational skills and knowledge regarding Health Communication Strategies concerning the overall Need of Additional Health Communication Strategies expressed by the ASHAs

The ASHAs from Nasvadi (59.95) had highly significant more demand than those from Chhotaudepur (34.01, p=0.000), Pavi Jetpur (40.55, p=0.001), Kavant (39.15, p=0.000) and significant than those belonging to Bodeli (10.18, p=0.000). Similarly, the ASHAs with excellent occupational skills (49.81) had shown a highly significant difference in the mean score of the ASHAs with moderate occupational

skills (37.31, p=0.000). It means that the ASHAs having high occupational skills demanded more Health Communication Strategies as compared to the ASHAs with a moderate level of occupational skills for performing their all duties.

The ASHAs with excellent occupational skills would have property understood their position and scope of Health Communication Strategies for their work. Therefore, their reflections have shaped their higher Need of Additional Health Communication Strategies to facilitate her work routine.

Further, it can be seen that the ASHAs with low knowledge (50.82) regarding Health Communication Strategies expressed significantly more need for Health Communication Strategies than those possessing high knowledge (40.05, p=0.031). It may be due to their lower level of knowledge about Health Communication Strategies, they might need more option to carry out their all duties. They may not be very sure of choosing and using limited Health Communication Strategies for their work, they might need various modes of communication while working with a variety of stakeholders associated with NHM.

In the following pages, ASHAs' Need of Additional Health Communication Strategies for the selected activities is presented in detail.

1. Home Visit
2. Planning and celebrating VHND-*Mamta* Day
3. Visit to health facilities
4. Village Health Sanitation and Nutrition Committee Meeting
5. Keeping and informing of records

4.8.1.1 Need of Additional Health Communication Strategies expressed by the ASHAs for Home visit.

Table 82

Distribution of ASHAs according to Need of Additional Health Communication Strategies for Home visit **n=326***

Need for Health Communication Strategies for Home visit	f	%
A) Graphic/Print media		
ASHA Diary	278	85.3
Register	264	81.0
Mamta card (Health card)	214	65.6
Chart/Poster	200	61.3
Information booklet	184	56.4
Banner	164	50.3
Leaflet	150	46.0
Flipbook	147	45.1
Flashcards	125	38.3
Wall painting	121	37.1
Sticker	83	25.5
Newspaper	76	23.3
Magazine	56	17.2
Hanging mobile	26	8.0
B) Electronic Media		
Mobile	232	71.2
CUG Sim card	200	61.3
Smartphone	124	38.0
Laptop	83	25.5
TV (cable)	71	21.8
Video Film	68	20.9
Radio	66	20.2
Internet	36	11.0
PowerPoint Presentation	19	5.8
Application	11	3.4
Audio Clip	11	3.4
C) Folk Media		
Folk Songs	54	16.6
Street play	40	12.3
Puppet show	16	4.9
D) Other media		
Sample	49	15.0

***Multiple responses**

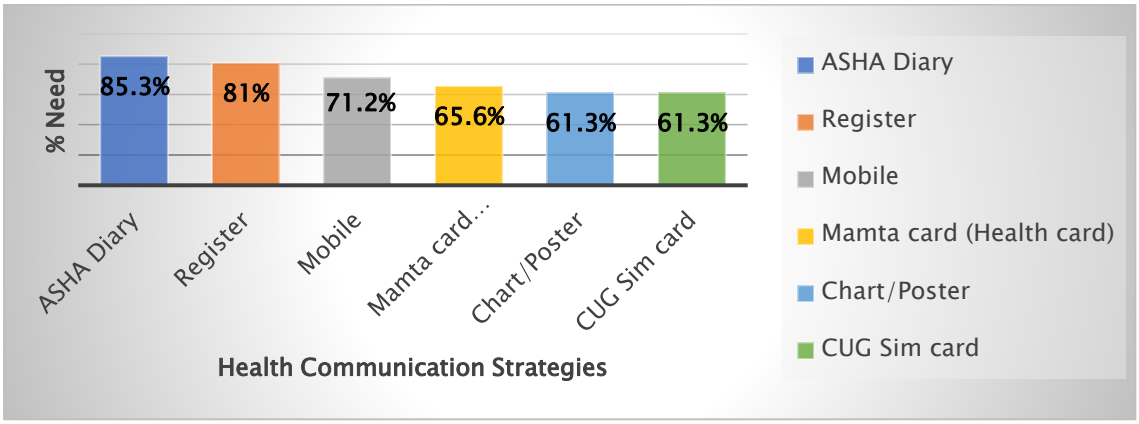
It is seen from table 82 that high majority of the ASHAs *i.e.* 85.3 % and 81.0 %, expressed their additional need for ASHA diary and Registers for their 'Home visit'. Moreover, among the Graphic and Print media category, it was reported that the majority (65.6 % and 61.3 %) of ASHAs needed *Mamta* card (Health card) and chart/posters respectively. Little more than half *i.e.* 56.4% and 50.3% of the ASHAs asked for an information booklet and banners. Little less than half *i.e.* 46.0 % and 45.1 % needed leaflet and flipbook followed by flashcards (38.3 %), wall painting (37.1 %), stickers (25.5 %), newspaper (23.3 %) and magazine (17.2 %) for performing their duties during 'Home visit'. Whereas, few of them (8.0%) reported that they need additional Hanging mobiles.

Among electronic and new media, mobile and CUG sim card were needed by the majority *i.e.* 71.2% and 61.3% of ASHAs. Some of the ASHAs *i.e.* 38.0 %, 25.5 %, 21.8 %, 20.9 %, 20.2 % expressed their need for smartphone, laptop, TV, Video film, Radio and internet respectively. A very few *i.e.* 5.8 % wanted PPT and 3.4% of the ASHAs needed application and audio clips to be used during their Home visit.

Table 82 reveals that only a few of the ASHAs reported about their need for Folk media *i.e.* folk songs (16.6%), Street play (12.3%), and Puppet show (4.9%). Similarly, few (15.0%) of the ASHAs needed additional samples for their work during home visit. The figure 43 shows that the ASHAs need ASHA kit and Chart/Posters. They also demanded a mobile phone and a CUG card.

Figure 43

Percentage Distribution of the ASHAs according to Top Five Need of Additional Health Communication Strategies for Home visit **n=326***



***Multiple Responses**

Table 83

Categorisation of ASHAs according to Need of Additional Health Communication Strategies for a Home visit **n=326**

Need of Additional HCS	f	%
More Need	139	42.6
Less Need	187	57.4

The table 83 show that larger group of the ASHAs *i.e.*57.4% needed less number of additional Health Communication Strategies whereas the other group *i.e.* 42.6% needed more number of additional Health Communication Strategies for their home visit.

Table 84

t-test showing variable wise differences in Need of Additional Health Communication Strategies for a Home visit **n=326**

Variable	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	9.99	5.93	0.34	0.734	NS
	Older	180	9.78	5.12	0.34		
Work Experience	Less work experience	116	9.68	5.50	0.46	0.643	NS
	More work experience	210	9.98	5.50	0.46		
Training	Partial Trained	34	9.4	3.8	0.5	0.607	NS
	Completely Trained	292	9.9	5.7	0.7		

***p<0.05, NS- Not Significant**

Above table 84 depicts that no significant difference in need of additional Health Communication Strategies for a Home visit were found amongst ASHAs for their age, experience and training received under NHM.

Therefore, null hypotheses stating that there will be no significant differences in 'need of additional Health Communication Strategies for a Home visit' by the ASHAs about their age, experience and training received under NHM were accepted.

It means that the ASHAs' Need of Additional Health Communication Strategies did not vary with their age, years of experiences and training under NHM.

Table 85

Analysis of Variance (ANOVA) showing variable wise differences in Need of Additional Health Communication Strategies for a Home visit **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-value	*p*-value	Remarks
Block	Between Groups	1164.4	5	232.9	8.6	0.00*	**Significant**
	Within Groups	8642.1	320	27.0			
Educational Qualification	Between Groups	133.6	3	44.5	1.5	0.22	NS
	Within Groups	9673.0	322	30.0			
Occupational Skills	Between Groups	489.4	2	244.7	8.5	0.00*	**Significant**
	Within Groups	9317.2	323	28.8			
Knowledge regarding HCS	Between Groups	91.5	2	45.8	1.5	0.22	NS
	Within Groups	9715.1	323	30.1			
Media Use	Between Groups	83.9	2	42.0	1.4	0.25	NS
	Within Groups	9722.7	323	30.1			

***p<0.05, NS- Not Significant**

It is seen from table 85 that significant differences were observed in ASHAs according to their blocks and occupational skills, for 'need of additional Health Communication Strategies for a Home visit'. Therefore, null hypotheses were not accepted.

However, no significant differences were found in 'need of additional Health Communication Strategies for a Home visit' by the ASHAs according to their education, knowledge regarding Health Communication Strategies and media use. Thus, null hypotheses stating that there will be no significant differences in 'need of additional Health Communication Strategies for a Home visit' by the ASHAs about their education, knowledge regarding Health Communication Strategies and media use were accepted.

Table 86

Tukey's HSD comparison for Need of Additional Health Communication Strategies for a Home visit by the ASHAs with Block and Occupational Skill **n=326**

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig.
Block	Chhotaudepur $\overline{x}$=7.49	Nasvadi $\overline{x}$=4.92	-3.561*	.973	.004
		Sankheda $\overline{x}$=11.05	-2.689	1.007	.084
		Bodeli $\overline{x}$=10.18	-5.909*	1.072	.000
		Pavi Jetpur $\overline{x}$=8.06	-0.566	.927	.990
		Kavant $\overline{x}$=10.62	-3.124*	.997	.023
	Sankheda $\overline{x}$=11.05	Pavi Jetpur $\overline{x}$=8.06	2.995*	.927	.017
	Nasvadi $\overline{x}$=4.92	Bodeli $\overline{x}$=10.18	3.220*	1.102	.043
		Pavi Jetpur $\overline{x}$=8.06	5.343*	1.030	.000
Occupational Skill	Excellent $\overline{x}$=11.14	Moderate $\overline{x}$=8.57	2.573*	.639	.000
		Poor $\overline{x}$=9.20	1.947	.943	.099

***p<0.05**

Table 86 depicts that highly significant mean differences were found amongst categories concerning the need of additional Health Communication Strategies

expressed by the ASHAs for Home visit *i.e.* Chhotaudepur (7.49) with Nasvadi (4.92,p=0.004), Bodeli (10.18,p=0.000) and significant with Kavant (10.62, p=0.023), similarly Sankheda (11.05) with Pavi Jetpur (8.06, p=0.017), Nasvadi (4.92) with Bodeli (10.18, p=0.043) and highly significant with Pavi Jetpur (8.06, p=0.099). Within the groups of the ASHAs, those belonging to Chhotaudepur required significantly more Health Communication Strategies than those from Nasvadi, Bodeli and Kavant, similarly, Sankheda demanded more than Pavi Jetpur and Nasvadi than Bodeli and Pavi Jetpur.

The same trend was observed, the ASHAs with excellent occupational skills (11.14) had shown a highly significant difference in the mean score of the ASHAs with moderate occupational skills (8.57, p=0.000). It means that the ASHAs having high occupational skills demanded more Health Communication Strategies as compared to the ASHAs with a moderate level of occupational skills for performing their duties during a Home visit.

The ASHAs with excellent occupational skills would have property understood their position and scope of Health Communication Strategies during home visit. Therefore, their reflections have shaped their higher need for Health Communication Strategies to improve on counselling and health education at households during their visit.

4.8.1.2 Need of Additional Health Communication Strategies expressed by the ASHAs for Planning and celebrating VHND.

Table 87

Distribution of ASHAs according to Need of Additional Health Communication Strategies for Planning and celebrating VHND **n=326***

Need for Health Communication Strategies for VHND	f	%
A) Graphic/Print media		
ASHA diary	269	82.5
Register	255	78.2
Mamta card (Health Card)	251	77.0
Chart/Poster	225	69.0
Banner	201	61.7
Information booklet	172	52.8
Flipbook	160	49.1
Leaflet	156	47.9
Wall painting	138	42.3
Flashcards	125	38.3
Sticker	91	27.9
Newspaper	67	20.6
Magazine	57	17.5
Hanging mobile	32	9.8
B) Electronic Media		
Mobile	202	62.0
CUG Sim card	175	53.7
Smartphone	91	27.9
TV	82	25.2
Laptop	77	23.6
Video Film	71	21.8
Radio	40	12.3
Internet	39	12.0
Computer	31	9.5
PowerPoint Presentation	20	6.1
Community Radio	16	4.9
Audio Clip	14	4.3
Application	12	3.7

C) Folk Media		
Folk songs	39	12.0
Street play	40	12.3
Puppet show	15	4.6
D) Other media		
Sample	63	19.3

***Multiple responses**

The table 87 reflects additional needs of Health Communication Strategies expressed by the ASHAs for planning and celebrating Village Health and Nutrition Day *i.e. Mamta* day, which is a monthly activity in each village.

Among graphic and print media, the majority of the ASHAs need following additionally:

- ASHA diary (82.5%)
- Register (78.2%)
- *Mamta* card (Health card) (77.0%)
- Chart/Poster (69.0%)
- Banner (61.7%)
- Information booklet (52.8%)

Little less than half of the ASHAs needed flipbook (49.1%), leaflet (47.9%) and wall painting (42.3%). Whereas Some of the ASHAs needed Flashcards (38.3%), Sticker (27.9%), Newspaper (20.6%), Magazine (17.5%) and a few *i.e.* 9.8 % required Hanging mobiles.

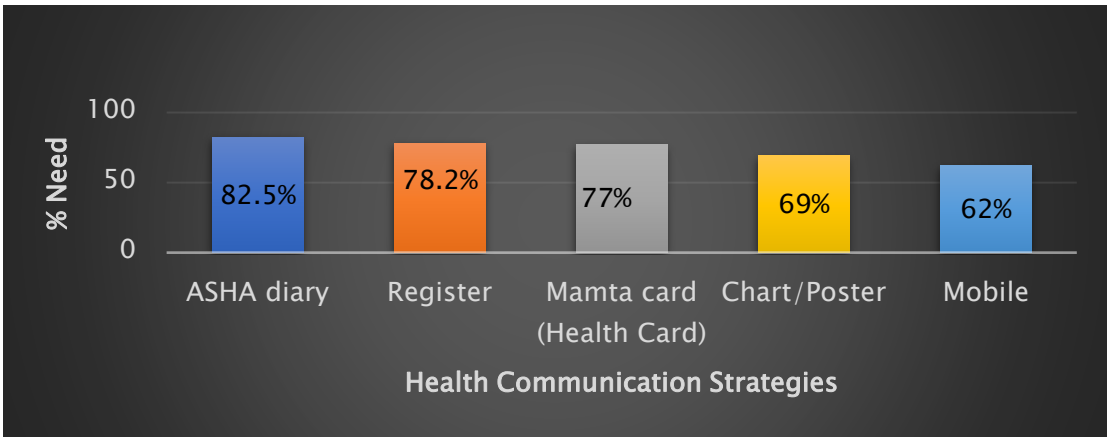
Among electronic media, 62.00 % and 53.70 % of the ASHAs expressed their need for mobile phones and CUG cards additionally, followed by:

- Smartphone (27.9%)
- TV (25.2%)
- Laptop (23.6%)
- Video film (21.8%)
- Radio (12.3%)
- Internet (12.0%)
- Computer (9.5%)

Whereas very few *i.e.* 9.5 %, 6.1 %,4.9 %,4.3 % and 3.7 % of the ASHAs additionally required Computer, PPT, community radio, audio clip and applications for 'planning and celebrating VHND'. However, few of the ASHAs expressed their need for folk media *i.e.* Street play (12.3%), Folk songs (12.0%), puppet shows (4.6%) and sample by 19.3 %.

Figure 44

Percentage Distribution of the ASHAs according to the Top Five Need of Additional Health Communication Strategies for VHND **n=326***



***Multiple Responses**

The Figure 44 represents that the ASHAs needed ASHA kit followed by Chart/poster and mobile phones to be used for arranging and successfully executing Village Health and Nutrition Day.

Table 88

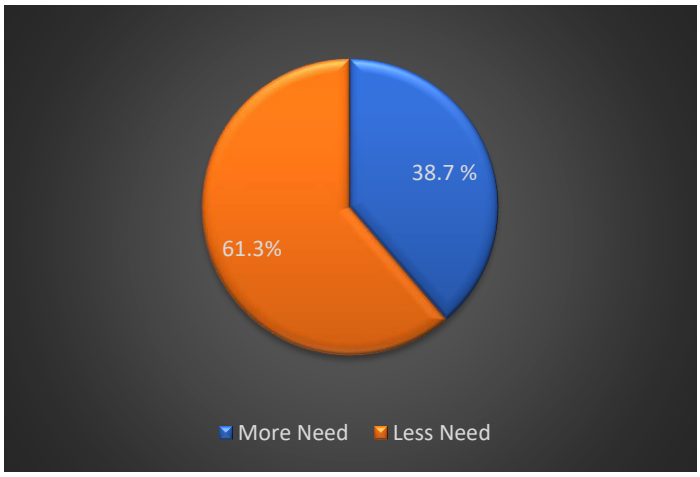
Categorisation of the ASHAs according to Need of Additional Health Communication Strategies for Planning and celebrating VHND **n=326**

Need of Additional HCS for Planning and celebrating VHND	f	%
More Need	126	38.7
Less Need	200	61.3

Table 88 and the figure 45 reveal that the comparatively little more than one-third of the ASHAs *i.e.* 38.7% required more number of Health Communication Strategies and 61.3% of the ASHAs expressed less need of additional Health Communication Strategies for planning and celebrating Village Health and Nutrition Day (*Mamta* day).

Figure 45

Categorisation of the ASHAs according to Need of Additional Health Communication Strategies for Planning and celebrating VHND **n=326**



However, in 'use' section (refer table 43) it was found that almost half of the ASHAs used more number of Health Communication Strategies during VHND but here, in need section the data reveal that their requirement was less. It may be due to lack of opportunity and time, insufficient infrastructure, the overburden of work especially on the VHND, indifferent attitude of beneficiaries *etc.* It may be possible that the ASHAs were satisfied with the provision of Health Communication Strategies and their use too, therefore they did not express the Need of Additional Health Communication Strategies for planning and celebrating Village Health and Nutrition Day (*Mamta day*).

Table 89

t-test showing variable wise differences in Need of Additional Health Communication Strategies for Planning and Celebrating VHND **n=326**

Variables	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	10.05	5.65	0.44	0.662	NS
	Older	180	9.78	5.29	0.43		
Work Experience	Less work experience	116	9.75	5.32	0.37	0.710	NS
	More work experience	210	9.98	5.52	0.38		
Training	Partially Trained	34	9.0	5.0	1.02	0.309	NS
	Completely Trained	292	10.0	5.5	1.10		

***p<0.05, NS- Not Significant**

The above table 89 depicts that no significant differences in need of additional Health Communication Strategies for 'Planning and Celebrating VHND' were found concerning age, work experience and training received under NHM by the ASHAs.

The ASHAs with more work experience used significantly more number of Health Communication Strategies during VHND (refer table 44), however, their experience did not influence their need of additional Health Communication Strategies for this village health day. This means that the ASHAs were satisfied with their use of Health Communication Strategies and therefore they did not require adding any more.

Therefore, null hypotheses stating that there will be no significant differences in need of additional Health Communication Strategies for 'Planning and Celebrating VHND' by the ASHAs about their age, work experience and training received under NHM were accepted.

Table 90

Analysis of Variance (ANOVA) showing variable wise differences in Need of Additional Health Communication Strategies for Planning and Celebrating VNHD **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-value	*p-value*	Remarks
Block	Between Groups	1370.7	5	274.1	10.6	0.00*	**Significant**
	Within Groups	8272.2	320	25.9			
Educational Qualification	Between Groups	122.0	3	40.7	1.4	0.25	NS
	Within Groups	9520.9	322	29.6			
Occupational Skills	Between Groups	772.6	2	386.3	14.1	0.00*	**Significant**
	Within Groups	8870.2	323	27.5			
Knowledge regarding HCS	Between Groups	170.2	2	85.1	2.9	0.06	NS
	Within Groups	9472.7	323	29.3			
Media Use	Between Groups	97.7	2	48.8	1.7	0.19	NS
	Within Groups	9545.2	323	29.6			

***p<0.05, NS- Not Significant**

Table 90 reveals that there were no significant differences in need of additional Health Communication Strategies for 'Planning and Celebrating VHND' by the ASHAs according to their educational qualification, knowledge regarding Health Communication Strategies and Media Use.

Therefore, null hypotheses stating that there will be no significant differences in need of additional Health Communication Strategies for 'Planning and Celebrating VHND' by the ASHAs about their educational qualification, knowledge regarding Health Communication Strategies and Media Use were accepted.

Whereas significant differences were seen in need of additional Health Communication Strategies for 'Planning and Celebrating VHND' by the ASHAs according to their block and occupational skills. Hence, null hypotheses were not accepted. Following table refer to further statistical analysis.

Table 91

Tukey's HSD comparison for in Need of Additional Health Communication Strategies for Planning and Celebrating VNHD with Block and Occupational Skill **n=326**

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig
Block	Nasvadi $\overline{x}$=14.00	Chhotaudepur $\overline{x}$=7.45	6.54386*	1.04871	.000
		Sankheda $\overline{x}$=10.59	3.40351*	1.04871	.016
		Bodeli $\overline{x}$=11.44	2.56000	1.07855	.169
		Pavi Jetpur $\overline{x}$=8.20	5.80000*	1.00775	.000
		Kavant $\overline{x}$=9.47	4.52308*	1.06930	.000
Occupational Skill	Excellent $\overline{x}$=11.42	Moderate $\overline{x}$=8.12	3.30427**	.62323	.000
		Poor $\overline{x}$=9.78	1.64532	.92032	.175

***p<0.05**

Above table 91 depicts that highly significant mean differences were found amongst categories for the Need of Additional Health Communication Strategies expressed by the ASHAs for planning and celebrating Village health and Nutrition day *viz.* Nasvadi (14.00) with Chhotaudepur (7.45, p=0.000), Pavi Jetpur (8.20,p=0.000) and Kavant (9.47, p=0.000); and significant with Sankheda (10.59, p=0.16). There were highly significant differences between pairs of blocks *i.e.* Bodeli (11.44) and Pavi Jetpur (8.20, p=0.009); Chhotaudepur (7.45) and Bodeli (11.44, p=0.001) and significant between Chhotaudepur (7.45) with Sankheda (10.59, p=0.014)

This means that the ASHAs from Nasvadi needed more Health Communication Strategies than Chhotaudepur, Sankeda, Pavi Jetpur and Kavant, similarly, there was higher demand expressed from Bodeli than Pavi Jetpur, and Chhotaudepur than Sankheda and Bodeli blocks respectively.

Little bit reversed findings are observed about blocks for additional needs of Health Communication Strategies. While comparing it with use section in table 46, it can be referred that in Nasvadi and Bodeli blocks, use of Health Communication Strategies during VHND was significantly low and in need section their needs were significantly higher than their counterparts. It may be attributed to the provision of Health Communication Strategies in Nasvadi, therefore their use was also low, but their occupational skills might have influenced their need of additional Health Communication Strategies.

Moreover, the ASHAs with excellent occupational skills (11.42) shown a highly significant difference in the mean score of the ASHAs with moderate occupational skills (8.12, $p=0.000$). It means that the ASHAs with high occupational skills need more Health Communication Strategies as compared to the ASHAs with a moderate level of occupational skills for performing their duties for planning and executing VHND also referred to as *Mamta* day.

Occupational skill was also a significant variable for their use during VHND (refer table 46). The ASHAs possessing excellent occupational skills would have observed that during VHND when all beneficiaries come to Anganwadi, they can be tapped using a variety of media. This day is a monthly feature of NHM, so arrange for a variety of media could be made in advance provided they have availability and accessibility. Multimedia approach with a group of individuals can bring desirable behavioural change.

The Figure 44 reflects that the demands presented by the ASHAs were more inclined towards graphic media followed by electronic and new media and least for folk media. Additional graphic media might be required to create environment and visibility to attract beneficiaries at the venue *i.e.* Anganwadi and electronic and new

media like smartphones, TV, Laptop, Video film *etc.* to hold their attraction and to present content in motion form.

Further, the ASHAs have reported that they were not formally trained for Health Communication Strategies including folk media, knowing the fact hiring professional folk media performers would be a costlier affair therefore very few of the ASHAs may have put up their demand for such folk media.

4.7.1.3 Need of Additional Health Communication Strategies for Visit to Health Facilities

Table 92

Distribution of ASHAs according to Need of Additional Health Communication Strategies for Visit to Health Facilities **n=326***

Need for HCS for Visit to Health facilities	f	%
A) Graphic/Print media		
Register	236	72.4
ASHA Diary	233	71.5
Mamta card (Health card)	193	59.2
Chart/Poster	177	54.3
Banner	147	45.1
Information booklet	132	40.5
Leaflet	132	40.5
Flipbook	118	36.2
Wall painting	106	32.5
Flashcards	97	29.8
Sticker	77	23.6
Newspaper	59	18.1
Magazine	51	15.6
Hanging mobile	25	7.7
B) Electronic Media		
Mobile	192	58.9
CUG Sim card	170	52.1
Smartphone	81	24.8
Laptop	69	21.2
TV	64	19.6
Video film	53	16.3
Radio	47	14.4

Internet	38	11.7
Computer	35	10.7
PowerPoint Presentation	18	5.5
Application	13	4.0
Community radio	11	3.4
Audio Clip	11	3.4
C) Folk Media		
Folk songs	27	8.3
Street play	19	5.8
Puppet show	9	2.8
D) Other media		
Sample	47	14.4

*Multiple responses

Above table 92 represents the Need of Additional graphic and print media for 'visit to health facilities' expressed by the ASHAs, which are as follow:

- Register (72.4%)
- ASHA Diary (71.5%)
- *Mamta* card (health card) (59.2%)
- Chart/Poster (54.3%)
- Banner (45.1%)
- Information booklet (40.5%)
- Leaflet (40.5%)
- Flipbook (36.2%)
- Wall painting (32.5%)
- Flashcards (29.8%)
- Sticker (23.6%)
- Newspaper (18.1%)
- Magazine (15.6%)
- Hanging mobile (7.7%)

Chart/Posters, Flipbook, Flash Cards and Banners help in seeking attraction whereas booklets and leaflets provide detail with graphics/pictures for easy understanding. Stickers at prominent place work as a reminder of certain messages like 'Wash you Hands', 'Keep Toilets Clean' *etc.*

Therefore, their demand was comparatively higher for graphic media. These media would facilitate staff available at health institutes and also to the ASHAs a companying pregnant mother and other patients.

Among the category of Electronic and new media the ASHAs additionally needed following strategies:

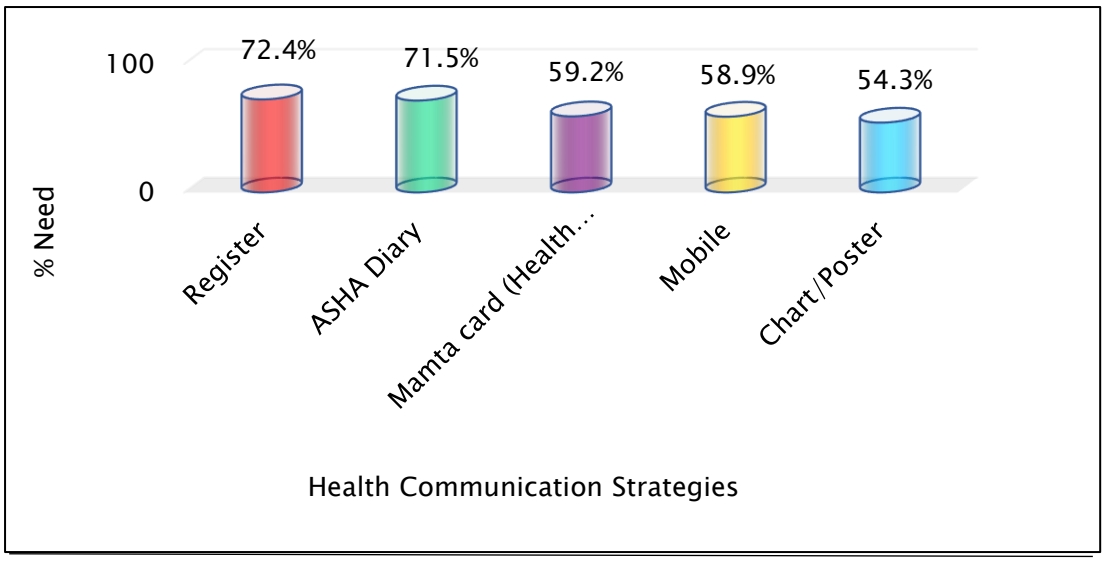
- Mobile (58.9%)
- CUG sim card (52.1)
- Smartphone (24.8%)
- Laptop (21.1%)
- TV (19.6%)
- Video film (16.3%)
- Radio (14.4%)
- Internet (11.7%)
- Computer (10.7%)
- Power-Point Presentation (5.5%)
- Application (4.0%)
- Community radio (3.4%)
- Audio clip (3.4%)

While, very few of the ASHAs felt the need of folk media *i.e.* folk songs (8.3%), street play (5.8%) and puppet show (2.8%).

Similarly, very few *i.e.* only 14.4 % of the ASHAs needed samples to be provided at the health centre so that they can show or use them for explaining concepts to the beneficiaries while their visit to the health centre.

Figure 46

Distribution of the ASHAs according to Top Five Need of Additional Health Communication Strategies for Visit to Health Facilities **n=326***



***Multiple Responses**

It can be seen from the above figure 46 that the ASHAs needed ASHA kit followed by Mobile and chart/posters for their visit to Health Facilities. This might be because they may not be provided with timely and sufficient supply.

Table 93

Categorisation of the ASHAs according to Need of Additional Health Communication Strategies for Visit to Health Facilities **n=326**

Need of Additional Health Communication Strategies for Visit to Health Facilities	f	%
More Need	112	34.4
Less Need	214	65.6

Table 93 and figure 47 reflect the additional needs of Health Communication Strategies expressed by the ASHAs for planning, coordinating and making any visit to health facilities. It is clear that the majority of the ASHAs (65.6%) needed less

number of Health Communication Strategies and remaining (34.4%) of the ASHAs reported their needs for more number of Health Communication Strategies.

Figure 47

Categorisation of the ASHAs according to Need of Additional Health Communication Strategies for Visit to Health Facilities **n=326**

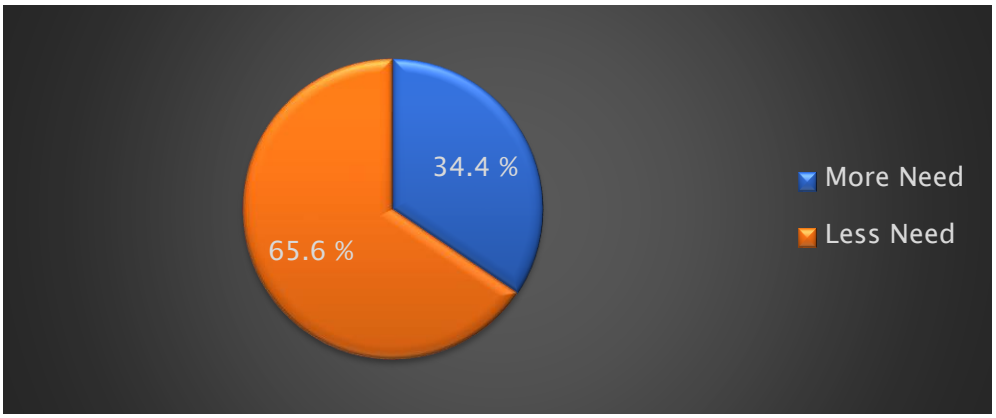


Table 94

t-test showing variable wise differences in Need of Additional Health Communication Strategies for Visit to Health Facilities **n=326**

Variable	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	8.01	5.96	0.47	0.636	NS
	Older	180	7.70	5.68	0.47		
Work Experience	Less work experience	116	7.66	5.82	0.400	0.689	NS
	More work experience	210	7.93	5.82	0.400		
Training	Partially Trained	34	6.91	4.82	0.981	0.328	NS
	Completely Trained	292	7.95	5.90	1.152		

***p<0.05, NS- Not Significant**

It can be seen from table 94 that no significant differences in need of additional Health Communication Strategies for 'Visit to Health facilities' were found for age, work experience and training received under NHM by the ASHAs.

Therefore, null hypotheses stating that there will be no significant differences in the need of additional Health Communication Strategies during 'Visit to Health facilities' by the ASHAs about their age, experience and training received under NHM were accepted.

Table 95

Analysis of Variance (ANOVA) showing variable wise differences in Need of Additional Health Communication Strategies for Visit to Health Facilities **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-value	*p*-value	Remarks
Block	Between Groups	1366.6	5	273.3	9.1	0.000*	**Significant**
	Within Groups	9625.7	320	30.0			
Educational Qualification	Between Groups	289.0	3	96.3	2.8	0.04*	**Significant**
	Within Groups	10703.3	322	33.2			
Occupational Skills	Between Groups	545.8	2	272.9	8.4	0.000*	**Significant**
	Within Groups	10446.5	323	32.3			
Knowledge regarding HCS	Between Groups	287.6	2	148.8	4.3	0.014*	**Significant**
	Within Groups	10704.7	323	33.1			
Media Use	Between Groups	16.0	2	8.0	0.2	0.786	NS
	Within Groups	10407.9	314	33.1			

***p<0.05, NS- Not Significant**

Table 95 depicts that significant differences were observed in ASHAs for their Need of Additional Health Communication Strategies for 'Visit to Health facilities' concerning their blocks, educational qualification, occupational skills and knowledge regarding Health Communication Strategies.

Therefore, null hypotheses stating that there will be no significant differences in need of additional Health Communication Strategies for 'Visit to Health facilities' by the ASHAs about their blocks, educational qualification, occupational skills and knowledge regarding Health Communication Strategies were not accepted.

However, significant differences were not observed in the Need of Additional Health Communication Strategies for ‘Visit Health facilities' by the ASHAs according to their media use. Thus, the null hypothesis stating that there will be no significant difference in the Need of Additional Health Communication Strategies for ‘Visit to Health facilities' by the ASHAs about their media use was accepted.

Table 96

Tukey's HSD comparison for Need of Additional Health Communication Strategies for Visit to Health Facilities with Block, Education, Occupational Skills and Knowledge regarding HCS **n=326**

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig
Block	Nasvadi $\overline{x}$=12.45	Chhota Udepur $\overline{x}$=6.12	6.327*	1.131	.000
		Sankheda $\overline{x}$=8.88	3.573*	1.131	.021
		Bodeli $\overline{x}$=7.76	4.690*	1.163	.001
		Pavijetpur $\overline{x}$=7.53	4.921*	1.087	.000
		Kavant $\overline{x}$=5.52	6.931*	1.153	.000
Education	Secondary $\overline{x}$=8.67	Primary $\overline{x}$=8.37	.299	.996	.991
		Higher Secondary $\overline{x}$=6.70	1.974*	.706	.028
		Graduate $\overline{x}$=6.67	2.004	1.729	.653
Occupational skill	Excellent $\overline{x}$=9.12	Moderate $\overline{x}$=6.34	2.778*	.676	.000
		Poor $\overline{x}$=7.76	1.360	.999	.362
Knowledge Regarding HCS	Low $\overline{x}$=9.64	Medium $\overline{x}$=7.88	1.778	.904	.122
		High $\overline{x}$=6.70	2.957*	1.005	.010

***p<0.05**

Table 96 reflects that ASHAs from Nasvadi (12.45) had a significantly high demand for additional Health Communication Strategies for their visit to health facilities than their counterparts from all the blocks *i.e.* Chhotaudepur

(6.12,p=0.000), Bodeli (7.76,p=0.001), Pavi Jetpur (7.53, p=0.000) and Kavant (5.52, p=0.000) and significant difference in their need from Sankheda (8.88, p=0.021). Moreover, ASHAs having studied up to secondary school (8.67) and having low knowledge about Health Communication Strategies (9.64) had a significant difference in mean score than those studied up to higher education (1.974, p=0.028) and high knowledge of Health Communication Strategies (6.70, p=0.01)

Highly significant mean differences were observed in ASHAs with excellent occupational skills (9.12) and with moderate occupational skills (6.34, p=0.000) Whereas there were no significant differences reported for the ASHAs studied primary and graduate level, with poor occupational skills and a medium level of knowledge regarding Health Communication Strategies.

It can be derived that the ASHAs belonging to Nasvadi block, studied up to secondary level, possessing excellent occupational skills with a low level of knowledge needed more number of additional Health Communication Strategies for their visit to Health facilities along with pregnant mother, patient or for attending meetings and pieces of training.

4.8.1.4 Need of Additional Health Communication Strategies for Village Health Sanitation and Nutrition Committee (VHSNC) Meeting.

Table 97

Distribution of ASHAs according to Need of Additional Health Communication Strategies for VHSNC Meeting **n=326***

Need for Health Communication Strategies for VHSNC Meeting	f	%
A) Graphic/Print media		
Register	238	73.0
ASHA diary	216	66.3
Chart/Poster	191	58.6
Banner	182	55.8
Mamta card/Health card	166	50.9
Leaflet	154	47.2
Information booklet	145	44.5
Flipbook	123	37.7
Wall painting	114	35.0
Flashcards	97	29.8
Sticker	82	25.2
Newspaper	77	23.6
Magazine	57	17.5
Hanging mobile	19	5.8
B) Electronic Media		
Mobile	195	59.8
CUG Sim card	158	48.5
Smartphone	93	28.5
Laptop	83	25.5
TV (cable)	75	23.0
Video Film	71	21.8
Radio	45	13.8
Internet	44	13.5
Computer	32	9.8
Community Radio	18	5.5
PowerPoint Presentation	17	5.2
Audio Clip	15	4.6

Application	14	4.3
C) Folk Media		
Folk songs	33	10.1
Street play	32	9.8
Puppet show	16	4.9
D) Other media		
Sample	44	13.5

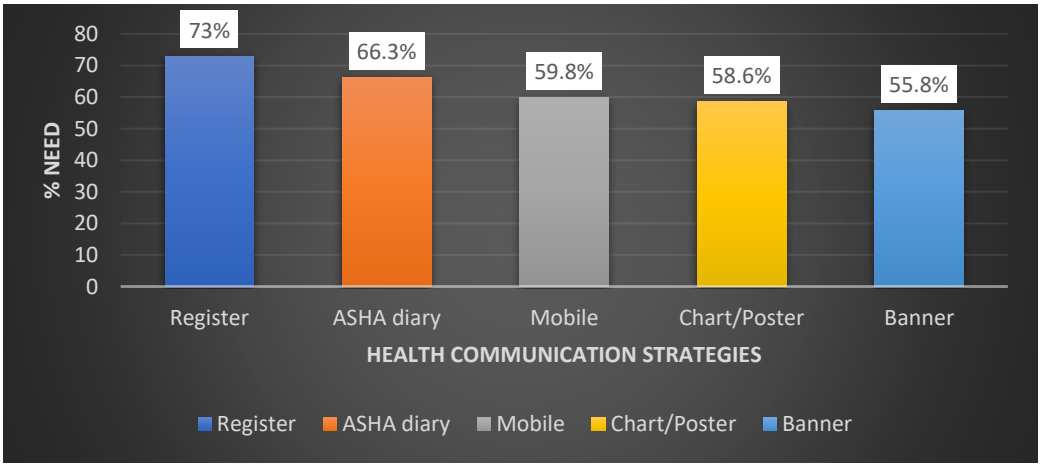
***Multiple responses**

Here, table 97 depicts that the ASHAs need following Health Communication Strategies under the category of graphic and print media of Village Health and Sanitation committee meeting. Highest among them was registers (73.0%), followed by ASHA diary (66.3%), Chart/poster (58.6%) and least was hanging mobile (5.8%). Further, under electronic media category, demand for Mobile phones was put up by the highest number of the ASHAs (59.8%) followed by CUG cards (48.5%) whereas a very of the ASHAs required computer (9.8%), Community radio (5.5%), PPT (5.2%) audio clip (4.6%) and Application (4.3%).

Table 97 also shows that very few of the ASHAs feel the need of folk songs (10.1%), Street play (9.8%) and puppet show (4.9%).

Figure 48

Distribution of the ASHAs according to Top Five Need of Additional Health Communication Strategies for VHSNC Meeting **n=326***



***Multiple responses**

The figure 48 highlights that the highest demand was for registers, followed by ASHA diary, these two media are part of the ASHA kit. The ASHAs also asked for a mobile phone may be to coordinate with members, chart/poster and banner may be for publicity and visibility.

Table 98

Categorisation of the ASHAs according to Need of Additional Health Communication Strategies for VHSNC meeting **n=326**

Need of Additional HCS for VHSNC Meeting	f	%
More Need	137	42.0
Less Need	189	58.0

It is clear from the above table 98 and the figure 49 that majority (58.00%) and remaining (42.00%) of the ASHAs needed less and more number of Health Communication Strategies respectively for VHSNC meeting.

Figure 49

Categorisation of the ASHAs according to Need of Additional Health Communication Strategies for VHSNC meeting **n=326**

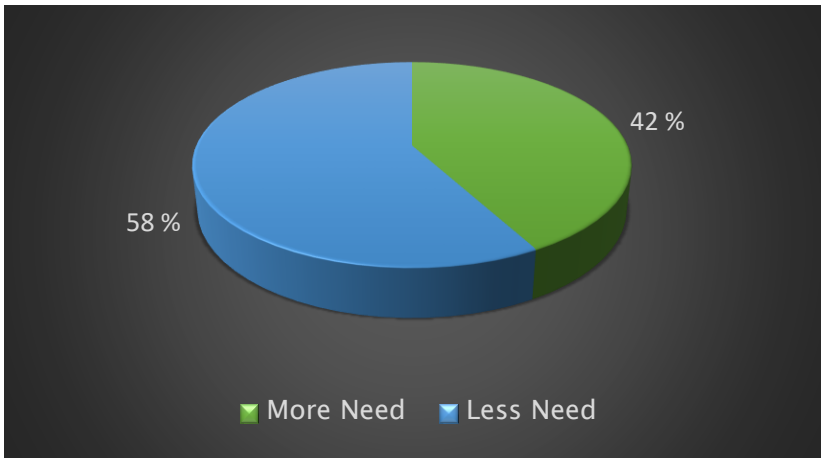


Table 99

t-test showing variable wise differences in Need of Additional Health Communication Strategies for VHSNC meeting **n=326**

Variable	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	8.87	6.23	0.322	0.748	NS
	Older	180	8.65	6.04	0.321		
Work Experience	Less work experience	116	8.59	6.28	0.355	0.723	NS
	More work experience	210	8.84	6.04	0.351		
Training	Partially Trained	34	7.1	4.9	1.616	0.107	NS
	Completely Trained	292	8.9	6.2	1.958		

***p<0.05 , NS- Not Significant**

Above table 99 depicts that no significant differences in need of additional Health Communication Strategies for 'VHSNC meeting' were found as per their age, experience and training received by the ASHAs.

Therefore, null hypotheses stating that there will be no significant differences in the need of additional Health Communication Strategies for 'VHSNC meeting' by the ASHAs about their age, experience and training received under NHM were accepted.

Table 100

Analysis of Variance (ANOVA) showing differences in Need of Additional Health Communication Strategies for VHSNC meeting **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-value	*p-value*	Remarks
Block	Between Groups	1290.8	5	258.2	7.6	0.000*	**Significant**
	Within Groups	10880.6	320	34.0			
Educational Qualification	Between Groups	168.8	3	56.3	1.5	0.21	NS
	Within Groups	12002.6	322	37.3			
Occupational Skills	Between Groups	490.8	2	245.4	6.8	0.001*	**Significant**
	Within Groups	11680.6	323	36.2			
Knowledge regarding HCS	Between Groups	277.7	2	138.9	3.8	0.024*	**Significant**
	Within Groups	11893.6	323	36.8			
Media Use	Between Groups	25.6	2	12.8	0.3	0.711	NS
	Within Groups	12145.7	323	37.6			

***p<0.05, NS- Not Significant**

Table 100 depicts that significant differences were observed in ASHAs according to their blocks, occupational skills and knowledge regarding Health Communication Strategies for the Need of Additional Health Communication Strategies for 'VHSNC meeting'.

Therefore, null hypotheses stating that there will be no significant differences in need of additional Health Communication Strategies for 'VHSNC meeting' by the ASHAs concerning their blocks, occupational skills and knowledge regarding Health Communication Strategies were not accepted.

However, no significant differences in the Need of Additional Health Communication Strategies for 'VHSNC meeting' by the ASHAs according to their

education qualification and Media Use were observed. Thus, corresponding null hypotheses were accepted.

Table 101

Tukey's HSD comparison for Need of Additional Health Communication Strategies for VHSNC Meeting with Block, Occupational Skill and Knowledge related to Health Communication Strategies **n=326**

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig.
Block	Nasvadi $\overline{x}$=13.50	Chhotaudepur $\overline{x}$=6.96	6.535*	1.203	.000
		Sankheda $\overline{x}$=9.44	4.061*	1.203	.011
		Bodeli $\overline{x}$=8.44	5.060*	1.237	.001
		Pavi Jetpur $\overline{x}$=8.49	5.014*	1.156	.000
		Kavant $\overline{x}$=6.94	6.558*	1.226	.000
Occupational Skill	Excellent $\overline{x}$=9.94	Moderate $\overline{x}$=7.31	2.634*	.715	.001
		Poor $\overline{x}$=8.80	1.137	1.056	.529
Knowledge regarding HCS	Low knowledge $\overline{x}$=10.85	Medium $\overline{x}$=8.45	2.398*	.952	.033
		High $\overline{x}$=8.15	2.700*	1.059	.030

***p<0.05**

The above table 101 depicts that there existed a highly significant difference in the needs expressed by the ASHAs belonging to Nasvadi (13.50) than those from Chhotaudepur (6.96, p=0.000), Bodeli (8.44, p=0.001), Pavi Jetpur (8.49, p=0.000) and Kavant (6.94, p=0.000) and significant difference with the ASHAs from Sankheda (9.44, p=0.011).

Concerning occupational skills, the ASHAs having excellent skills (9.94) had highly significant need than those with a moderate level of occupational skills (7.31, p=0.001).

Further, the ASHAs with low knowledge about Health Communication Strategies (10.85) had significantly more need in comparison to their counterparts *i.e.* medium knowledge (8.45, p=0.033) and high knowledge (8.15, p=0.030) for VHSNC meetings.

The ASHA is a convener of VHSNC meeting which is conducted every month. Majority of them expressed fewer demands for Health Communication Strategies to be used for such meeting where discussion and decisions about sanitation, healthy living conditions and other environmental determinants of health are taken into consideration. These meetings are supplemented with additional habitation level it is necessary for providing health education too. (Ministry of Health and Family Welfare,2008)

Among all the ASHAs, the group of ASHAs from Nasvadi block and a group possessing excellent occupational skills represent significantly more additional needs of Health Communication Strategies.

Besides this, the ASHAs having poor knowledge demanded more Health Communication Strategies than their counterparts. This may be due to their poor knowledge about Health Communication Strategies might not have made them confident enough to use already available communication channels. Therefore, to have more options for selection, trial and use they might have demanded significantly more number of Health Communication Strategies for performing their roles during VHSNC meeting.

4.7.1.5 Need of Additional Health Communication Strategies for Keeping and Informing about Records.

Table 102

Distribution of ASHAs according to Need of Additional Health Communication Strategies for Keeping and Informing about Records **n=326***

Need for HCS for Keeping and Informing about records	f	%
A) Graphic/Print media		
Register	264	81.0
ASHA diary	264	81.0
Mamta card (Health card)	192	58.9
Chart/Poster	155	47.5
Banner	112	34.4
Leaflet	123	37.7
Information booklet	108	33.1
Flipbook	78	23.9
Wall painting	75	23.0
Flashcards	59	18.1
Sticker	49	15.0
Newspaper	45	13.8
Magazine	39	12.0
Hanging mobile	25	7.7
B) Electronic Media		
Mobile	217	66.6
CUG Sim card	162	49.7
Smartphone	128	39.3
Laptop	73	22.4
Radio	45	13.8
TV (cable)	44	13.5
Computer	43	13.2
Video film	31	9.5
Internet	23	7.1
Power-Point Presentation	29	8.9
Application	17	5.2
Community radio	14	4.3
Audio clip	12	3.7
C) Folk Media		
Folk songs	30	9.2
Street play	19	5.8
Puppet show	12	3.7

***Multiple responses**

Table 102 shows that the same majority *i.e.* 81 % of the ASHAs need registers and ASHA diary additionally. The ASHAs needed following supply of Health Communication Strategies for 'keeping and informing about records':

- *Mamta* card (Health card) (58.9%)
- Chart/Poster (47.5%)
- Leaflet (37.7%)
- Banner (34.4%)
- Information booklet
- Flipbook (23.9%)
- Wall painting (23.0%)
- Flashcards (18.1%)
- Sticker (15.0%)
- Newspaper (13.8%)
- Magazine (12.0%)
- Hanging mobile (7.7%)

Moreover, the ASHAs expressed the additional need for electronic media to facilitate their duty of maintaining and informing about the health records to the authorities and concerned individuals. The highest number that is 66.6 % and the lowest that is 3.7 % of the ASHAs need Mobile and audio clips respectively. The descending order list of media is as follow:

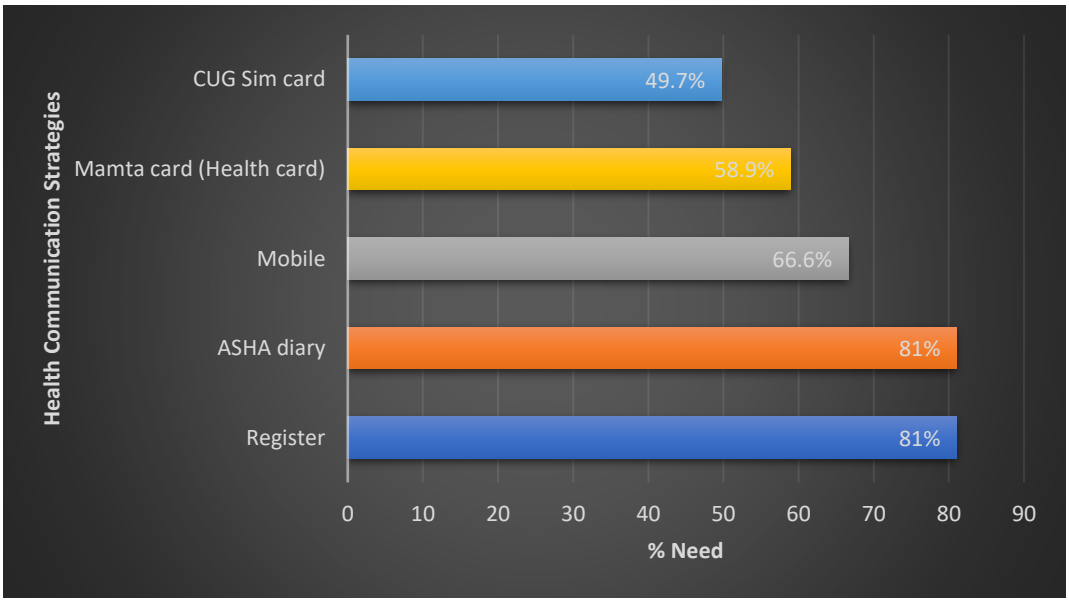
- CUG Sim card (49.7%)
- Smartphone (39.3%)
- Laptop (22.4%)
- Radio (13.8%)
- TV (cable) (13.5%)
- Computer (13.2%)
- Video film (9.5%)
- Internet (7.1)
- Power-Point Presentation (8.9%)

- Application (5.2 %)
- Community radio (4.3%)

Apart from this, table 102 further shows that very few of the ASHA felt the need of folk media and samples for 'keeping and informing about records'.

Figure 50

Percentage Distribution of the ASHAs according to Top Five Need of Additional Health Communication Strategies for Keeping and Informing about Records **n=326***



The above figure 50 represents the ASHAs' top five need of additional Health Communication Strategies, among them, the highest need was expressed for CUG Sim card followed by mobile phone and ASHA kit (*Mamta* card, ASHA diary and Registers).

The ASHAs responsibility is to keep records of birth-death, eligible couples, vaccination ANC-PNC data, stock of drugs *etc.* This can be fulfilled by *Mamta* Card, diary and registers. Her needs for these may be due to poor and delayed supply and insufficient stock of it. Besides this, she needs to inform about any health-related emergency in the village for which she uses a mobile phone to contact the officers or

superiors. Majority demanded a mobile phone also half of them requested for CUG card which means they expect the government to provide with handset and CUG for performing her duties well. They may be using handset borrowed from her family members and the CUG card (which was provided earlier) would not be functional.

ASHAs' needs related to other graphic-print, electronic and new media well as folk media may be for the dissemination of such important data among villagers, stakeholders and others.

Table 103

Categorisation of the ASHAs according to Need of Additional Health Communication Strategies for Keeping and Informing about Records **n=326**

Need of Additional HCS for Keeping and informing about records	f	%
More Need	137	42.0
Less Need	189	58.0

It is clear from the above table 103 and figure 51 that majority (58.00%) and remaining (42.00%) of the ASHAs additionally needed less and more number of Health Communication Strategies respectively for keeping and informing about records.

Figure 51

Categorisation of the ASHAs according to Need of Additional Health Communication Strategies for Keeping and Informing about Records **n=326**

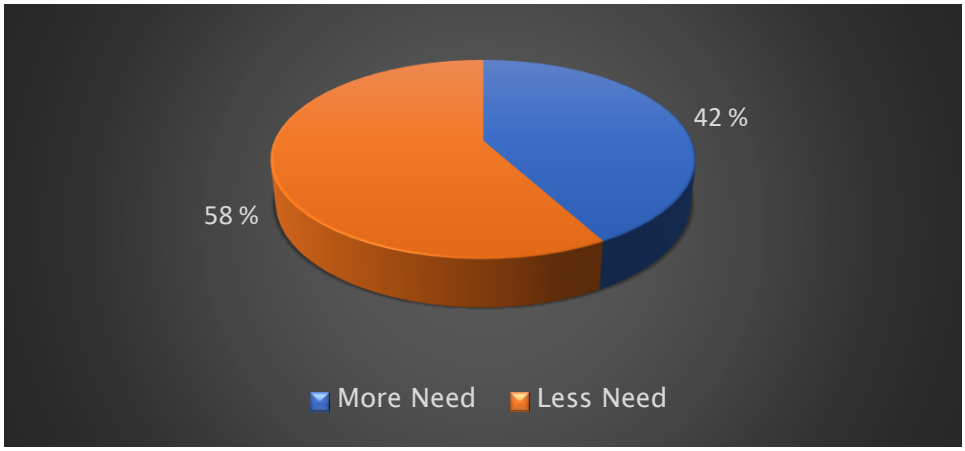


Table 104

t-test showing variable wise differences in Need of Additional Health Communication Strategies for Keeping and Informing about Records **n=326**

Variable	Category	N	Mean	Std. Deviation	t-Value	*p*-Value	Remarks
Age	Young	146	7.76	5.75	0.158	0.874	NS
	Older	180	7.66	5.11	0.157		
Work Experience	Less work experience	116	7.83	5.50	0.291	0.771	NS
	More work experience	210	7.64	5.69	0.294		
Training	Partially Trained	34	6.24	3.7	1.616	0.107	NS
	Completely Trained	292	7.80	5.7	2.267		

***p<0.05, NS- Not Significant**

Above table 104 depicts that no significant differences in need of additional Health Communication Strategies for 'Keeping and informing about records' were observed as per their age, work experience and training received under NHM by the ASHAs.

Therefore, null hypotheses stating that there will be no significant differences in the need of additional Health Communication Strategies for 'Keeping and informing about records' by the ASHAs about their age, work experience and training received under NHM were accepted.

Table 105

Analysis of Variance (ANOVA) showing variable wise differences in Need of Additional Health Communication Strategies for Keeping and Informing about Records **n=326**

Variables	Source	Sum of Squares	df	Mean Square	F-value	*p-value*	Remarks
Block	Between Groups	701.1	5	140.2	4.6	0.000*	**Significant**
	Within Groups	9556.5	320	29.8			
Educational Qualification	Between Groups	83.9	3	28.0	0.9	0.45	NS
	Within Groups	9994.1	319	31.3			
Occupational Skills	Between Groups	119.9	2	59.9	1.9	0.147	NS
	Within Groups	9958.1	320	31.1			
Knowledge regarding HCS	Between Groups	78.0	2	39.0	1.2	0.288	NS
	Within Groups	10000.0	320	31.2			
Media Use	Between Groups	78.5	2	39.2	1.3	0.286	NS
	Within Groups	9999.5	320	31.2			

***p<0.05, NS- Not Significant**

It is seen from table 105 that no significant differences in the need of additional Health Communication Strategies were found for 'Keeping and informing about records' by the ASHAs according to their educational qualification, occupational skills, knowledge regarding Health Communication Strategies and media use.

Thus, null hypotheses stating that there will be no significant difference in the need of additional Health Communication Strategies for 'VHSNC meeting' by the ASHAs about their educational qualification, occupational skills, knowledge regarding Health Communication Strategies and media use were accepted. It is further noted that there existed a significant difference amongst the ASHAs

belonging to six blocks of the district. Hence post hoc test was carried out for further detailed understanding.

Table 106

Tukey's HSD comparison for Need of Additional Health Communication Strategies for Keeping and Informing about Records with Block **n=326**

Variable	Variable (I)	Variable (J)	Mean diff	Std Error	Sig.
Block	Sankheda $\overline{x}$=10.33	Chhota Udepur $\overline{x}$=5.98	4.351*	1.024	.000
		Bodeli $\overline{x}$=7.90	2.433	1.059	.198
		Nasvadi $\overline{x}$=6.60	3.733*	1.127	.013
		Pavi Jetpur $\overline{x}$=8.29	2.048	.975	.290
		Kavant $\overline{x}$=6.60	3.737*	1.048	.006

***p<0.05**

It can be derived from table 106 that there were significant differences in the needs expressed by the ASHAs belonging different blocks. The ASHAs from Sankheda (10.33) needed a highly significant number of Health Communication Strategies than those from Chhotaudepur (4.351, p=0.000) and Kavant (6.60, p=0.006) and significantly more than those from Nasvadi (6.60, p=0.013) for their work related to maintaining and giving information about health records of their area.

It means that the highest demand was raised by the ASHAs from Sankheda block, which is significantly higher than the ASHAs from Chhotaudepur, Kavant and Nasvadi.

As per data on the provision of Health Communication Strategies, it was found that the ASHAs belonging to Sankheda had the highest provision, whereas their use for keeping and informing about records was on the lower side as compared to the other five blocks of the selected tribal district. However, table 106 reflects that the

Need of Additional Health Communication Strategies for records was highest among Sankheda.

The probable reasons could be; unavailability of appropriate and need-based media, lack of opportunity, knowledge and training to use available Health Communication Strategies. Therefore, the need expressed by them (ASHAs from Sankheda block) might have been significantly high for keeping and informing about records.

4.8.2 Responses of the ASHAs during FGDs to Need of Additional Health Communication Strategies

FGDs with ASHAs helped them to ponder upon their additional need regarding Health Communication Strategies. The points discussed during FGDs were analysed and the following themes were derived.

Theme	Sub-themes
Need of Additional HCS	Improvement in current Health Communication Strategies
	Need of Additional Health Communication Strategies
	Need for training for Health Communication Strategies

4.8.2.1 Need for Improvement in current Health Communication Strategies reported by the ASHAs.

Box 23

Verbatims of the ASHAs on Need for Improvement in current Health Communication Strategies

Need for Improvement in current Health Communication Strategies reported by the ASHAs
'ભીંત ચિત્રો, પોસ્ટરો ખાલી આંગણવાડી હોય ત્યાં નહિં પણ આખા ગામમાં જ્યાં દિવાલ હોય ત્યાં થોડા લગાવ્યા હોય તો સારું રહે. જેમ કે સરકારી દુકાન, ગ્રામ પંચાયત કે દૂધ ડેરી હોય.' *(Wall paintings and posters should not only be displayed at Anganwadi but also should be at many other public places covering the whole of the village like, government shop, gram panchayat, dairies, court and cooperatives etc.)*
''સ્ટીકર્સવાળા પોસ્ટર્સ દિવાલ પર ચોંટાતા નથી. એની જગ્યાએ એ પેન્ટ કરી દઈએ કે ફલેક્ષ વાળા લગાવી દે તો ચાલે.' *(Sticker (self-adhesive) posters are difficult to stick on the wall. Instead, same can be painted or printed on flex (banner))*
'કોઈપણ ચિત્રની જોડે આશા બહેન દોરી હોય, તેના થી સરલ રીતે સમજાઈ શકીએ.' *(character (picture/image) of ASHA should be accommodated in any health-related material for the clear association.)*

The participant ASHAs expressed the need for improvised pictures in existing charts/posters and inclusion of their native dialect. More and large size pictures are required to better explain aspects related to health care. They also suggested putting posters, wall paintings across the village, like Government shops, Gram Panchayat, dairies, cooperatives, court *etc.* by mentioning following,

> *'ભીંત ચિત્રો, પોસ્ટરો ખાલી આંગણવાડી હોય ત્યાં નહિં પણ આખા ગામમાં જ્યાં દિવાલ હોય ત્યાં થોડા લગાવ્યા હોય તો સારું રહે. જેમ કે સરકારી દુકાન, ગ્રામ પંચાયત કે દૂધ ડેરી હોય.'*
> (Wall paintings and paintings should not only be displayed at Anganwadi but also many other public places covering the whole of the village like government shop, gram panchayat, dairies, court and cooperatives *etc.*)

Some ASHAs mentioned their experiences, that stickers and posters were difficult to paste at public places, they easily get torn and so suggested painting the same on walls instead or using flex material to get it printed on.

4.8.2.2 Need of Additional Health Communication Strategies reported by the ASHAs.

Box 24

Verbatims of the ASHAs on Need of Additional Health Communication Strategies

Need of Additional Health Communication Strategies reported by the ASHAs
'રૈલી કાઢીને સમજાવી શકીએ.' *(More rallies should be planned for mass level mobilisation)*
'અલગ-અલગ ચાર્ટ/પોસ્ટરો હોય તો સમજવામાં સરલ પડે. ચિત્રો હુંગાથે હોઈને કે આવુ એ થાય, એને જોઈ સમજાવીએ તો સારું.' *(charts/posters on various topics can facilitate in easy explanation, with pictures learning becomes clear.)*
'લોક માધ્યમો બનાવવા જોઈએ એ રીઅલી માં જુએ તો એમના મગજમાં પણ ઉતરે ને પછી એ રીતના આપણું સાથ-સહકાર એટલે વધારે સારું.' *(Folk media should be produced, people get associated with media when they watch on their own, they cooperate (during counselling) …Folk media are better)*
'મોબાઈલની જરુર છે, એ હોય તો આપણે તરત જ જણાય શકીએ કે ચાલો ભાઈ આ છે જુઓ તમે … સમજાઈ શકીએ … ને મોબાઈલમાં બતાઈ દઈએ ને તો તરત જ આવી જાય.' *(Mobile (smart) phone is the urgent need, we can show pictures/video….can explain…mobile can attract beneficiaries to attend the programme)*
'મમતા દિવસે ટી.વી. મુકવુ જોઈએ ત્યાં, બધા લાભાર્થીઓ આવે ને બધા સમજે એમ એનાથી વહેલા સમજે.' *(TV set should be arranged for VHND- Mamata day as many beneficiaries come there…it creates understanding…easy and better way)*

'ભવઈ સ્વચ્છતા વિશે આવે, પી.એચ.સી., પંચાયત પર કરાવે તો બહુ સારું પરિણામ મળે.' *(If Bhavai-folk media on cleanliness is organised at PHC…then it would harness positive result)*
'ગામની ભાષા અલગ હોય, અમારી (લોકલ) ગુજરાતી ભાષામાં (બોલીમાં) હમજાવાય.' *(Villagers speak local language…should be explained in local dialect..(means use of local words/terminologies))*
ફિલ્મ બનાવી જોઈએ (કાડી કેમ મરી…?) ગામડાઓમાં બતાવતા પહેલા, ફેર પડે.' *(Issue-based film should be produced like (Kadi kem Mari…??) …earlier, we used to show… have witnessed its impact in the village)*

There existed a high demand for electronic and digital media like TV and smartphones. They could be used to show videos, as the impact of audio-visual communication is better. People found digital communication interesting as compared to verbal communication alone. As pointed out by ASHAs that not all houses in the village have Television so people were interested and having one at Anganwadi which could be used on *Mamta* divas for attracting maximum people.

> *'મમતા દિવસે ટી.વી. મુકવુ જોઈએ ત્યાં, બધા લાભાર્થીઓ આવે ને બધા સમજે એમ એનાથી વહેલા સમજે.'*
> *(TV set should be arranged for VHND- Mamta day as many beneficiaries come there…it creates understanding…easy and better way)*

Almost all ASHAs impressed upon their demand for provision of a smartphone to them, as they said,

> *'મોબાઇલની જરુર છે, એ હોય તો આપણે તરત જ જણાય શકીએ કે ચાલો ભાઇ આ છે જુઓ તમે … સમજાઇ શકીએ … ને મોબાઇલમાં બતાઇ દઇએ ને તો તરત જ આવી જાય.'*
> *(mobile (smart) phone is the urgent need, we can show pictures/video….can explain…mobile can attract beneficiaries to attend the programme)*

Smartphones were the handy device helpful for not only knowledge dissemination but also help as assistant for maintaining a work schedule, data entry and management, stock keeping *etc.* as expressed by the participant ASHAs.

Some of the ASHAs insisted upon need of folk media too,

'લોક માધ્યમો બનાવવા જોઈએ એ રીઅલી માં જુએ તો એમના મગજમાં પણ ઉતરે ને પછી એ રીતના આપણું સાથ-સહકાર એટલે વધારે સારું.'
(Folk media should be produced, people get associated with media when they watch on their own, they cooperate (during counselling) …Folk media are better)

Further, Mass mobilisation could be done by organising rallies, as reflected by the ASHAs. Majority of the ASHAs demanded a variety of posters and charts. They have experienced potential benefits of graphical media for publicity, knowledge dissemination and counselling.

4.8.2.3 Responses of the ASHAs during FGDs to Need for Training of Health Communication Strategies.

Box 25

Verbatims of the ASHAs on Need for Training of Health Communication Strategies

Need for Training of Health Communication Strategies reported by the ASHAs
લોક માધ્યમોની ટ્રેનિંગ નથી મળી, આપ તો અમે પણ મમતા દિવસે નાટકો ભજવીયે.' *((we have) not received training for Folk media. If given training then we will also perform a drama on Mamta day.)*
'એફ.એચ.ડબ્લ્યુ. બહેનોને આપેલા છે તેવા ફોન આપે તો કામગીરી સારી રીતે થાય … અમને એ ફોન ની તાલિમ પણ આપવી જોઈએ.' *(We should be provided with a smartphone just like FHWs…then we would be able to perform effectively…however, we would need training for its use.)*

Few of the ASHAs were very enthusiastic in getting trained for folk media. They expressed it by saying,

'લોક માધ્યમોની ટ્રેનિંગ નથી મળી, આપ તો અમે પણ મમતા દિવસે નાટકો ભજવીયે.'

((we have) not received training for Folk media. If given training, then we will also perform a drama on Mamta day.)

They realised the benefits of smartphones by observing the usage of FHWs'. Almost all the ASHAs expressed their need regarding the provision of mobile phones. Therefore, they also want to undergo such training. It was reflected in their words,

> *'એફ.એચ.ડબ્લ્યુ. બહેનોને આપેલા છે તેવા ફોન આપે તો કામગીરી સારી રીતે થાય ... અમને એ ફોન ની તાલિમ પણ આપવી જોઇએ.'*
> *(We should be provided with a smartphone just like FHWs…then we would be able to perform effectively…however, we would need training for its use.)*

4.8.3 Responses of the ASHA Facilitators during FGDs to Need of Additional Health Communication Strategies

In the following box 26, ASHA Facilitators' responses regarding **the Need of Additional Health Communication Strategies** are listed. They expressed their needs during Focus Group Discussion organised by the researcher in all six blocks of Chhotaudepur district.

Box 26

Verbatims of the ASHA Facilitators on Needs for Additional Health Communication Strategies

Need of Additional Health Communication Strategies reported by the ASHA Facilitators
'અમારી પાસે ટી.વી. કે કોઇપણ વિગતો બતાવી શકાય તેવી કોઇ સુવિધા સરકારે આપી નથી.' *(We are been not provided by the government with TV sets, wherein we can show health-related programmes in detail.)*
'ફલીપબુક દરેક આશા બેન ને આપે ને તેમને સરલ રીતે સમજાઇ શકાય.' *(Flipbooks given to ASHAs are very effective in explanation, more such should be developed.)*
'અમુક આશા બહુ ભણેલી ના હોય તો ચિત્રો દ્વારા સમજાઇ શકે છે.' *(Those ASHAs with comparatively low education can explain well with the support of graphic media.)*

'અમને ફેસીલીટેટર ને છે ને કોઇ જ ટ્રેનિંગ નહીં મળે. THO સાહેબ આપે છે તેજ.' *(Facilitators are not given any training except that the training provided by THO (Doctor))*
'ભવઇ બહુ ઓછી થઇ ગયી છે કેમ કે અમને હવે અહિંથી તાલીમ મળી નથી તેથી અમે નથભ કરી શકતા.' *(Bhavai performances have decreased drastically. Since we are not provided with such training related to performance were unable to perform.)*

ASHA Facilitators from Chhotaudepur block, demanded provision of the bigger screen so that they can arrange for video shows promoting health education. However, in some PHC where electricity was not available there, they should be provided with electricity first.

On the contrary, some of the ASHA Facilitators reported their need for detailed, descriptive pictorial materials on Mother and Child health care, especially high-risk mother and child. They reflected that electronic media cannot be used efficiently due to power cut-off and network problems.

> *'અને વીડિયો, ફિલ્મ એ બધા માધ્યમો ઓછા કામ લાગે છે, કેમ કે અહિં સૌથી મોટી મુશ્કેલ લાઇટ અને ટૉવરની છે.'*
> *(Video, films etc. are less useful due to major problems related to electricity supply and network.)*

Further, ASHA Facilitators observed that flipbook related to different topics with more pictures found to be more effective. Since they do not have sufficient, they asked for more flipbooks. Pictorial media like flip cards, flipchart can be used during a home visit, Mamata day which facilitates Inter-Personal Communication (IPC).

ASHA Facilitators are supposed to maintain registers wherein they filled up details on 94 topics each mother. In a complaining tone, they expressed an urgent need for registers, as they were not provided since for last year. They had to buy their notebooks to use them as registers. The similar need for *Mamta* cards and ASHA diary for ASHAs was reported by the ASHA Facilitators.

Some of the ASHA Facilitators commented on the design aspect of the new *Mamta* Cards. They mentioned that, earlier, the size of *Mamta* card was big enough to note all details and now it is of smaller size, due to which they face difficulty to feed all the necessary information. ASHA Facilitators shared concern of the possibility of the smaller *Mamta* card getting lost was higher, although no such case has occurred as ASHA Facilitators shared that the mothers were well aware. Hence, the need for considering the overall design aspect in future has emerged for any such health communication media.

> *'ભવઈ બહુ ઓછી થઈ ગયી છે કેમ કે અમને હવે અહિંથી તાલીમ મળી નથી તેથી અમે નથી કરી શકતા.'*
> *(Bhavai performances have decreased drastically since we are not provided with such pieces of training related to performance.)*

ASHA facilitators also shown their need and interest in receiving training related to Health communication, especially for folk media.

4.8.4 Responses of the Female Health Workers during FGDs to Need of Additional Health Communication Strategies

Female Health Workers from all six blocks need certain additional Health Communication Strategies, which they shared during Focus Group Discussion. Their Expressions are listed in their own words in the box below followed by its interpretation.

Box 27

Verbatims of the Female Health Workers on Need of Additional Health Communication Strategies

Need of Additional Health Communication Strategies reported by Female Health Workers
'નવા પ્રચાર-પ્રસારના માધ્યમો જેમ કે લાઉડ સ્પીકર નો ઉપયોગ કરવો જોઈએ.' *(New communication media should be used like for example loudspeaker)*
'પોસ્ટર વધુ જગ્યા ઉપર લગાવાથી જાગૃતતા આવે છે.' *(Posters should be displayed at more places for visibility and awareness.)*
'ગૃહમુલાકાત માટે પોસ્ટરો અને ફલીપબુક, ફિલ્મો બતાવીને સારી રીતે સમજણ આપી શકાય છે.' *(For home visit flipbooks and posters should be developed and films should be developed for group communication.)*
'બધી ફેસીલીટેટર બહેનો, આશા બહેનો ને ફોન આપી દેવા જોઈએ જેથી સરલ અને ઝડપી વાત કરી શકે.' *(All the ASHAs and ASHA facilitators should be provided with TeCHO mobiles. This will ease and speed up communication.)*
'દરેક પી.એચ.સી. અથવા આંગણવાડી પર એલ.સી.ડી. અને સ્કીન આપવા જોઈએ જેથી વધુ લોકો ને આકર્ષિત કરી શકાય.' *(Facility of LCD should be established at each PHC or Anganwadi to attract maximum beneficiaries.)*

FHW mentioned the need for Health Communication Strategies in a local dialect and local village representation in terms of dressing and surrounding situations. Also, the use of role-playing, street plays, that have stopped was suggested to restart and reinforced to accelerate the pace of health education in their tribal district.

They suggested for inclusion of pictures, posters and wall paintings at strategic public places like Panchayat, community hall, banks, bus stand and so on, for promoting awareness and reminder of health care messages.

'પોસ્ટર વધુ જગ્યા ઉપર લગાડવા થી જાગૃતતા આવે છે.'

(Posters should be displayed at more places for visibility.)

During FGD it was highlighted that new communication media should be prepared for various contact approaches. They suggested developing a strategic plan to reach out to the maximum of mass in an effective way to be it, home visit, Mamta day or any mass level gathering.

'ગૃહમુલાકાત માટે પોસ્ટરો અને ફ્લીપ બુક, ફિલ્મો બતાવીને સારી રીતે સમજણ આપી શકાય છે.'

(For home visit flipbooks and posters should be developed and films should be developed for group communication.)

Their Need was not limited to designing and production of innovative media but also improvement in infrastructure facilities like,

'દરેક પી.એચ.સી. અથવા આંગણવાડી પર એલ.સી.ડી. અને સ્ક્રીન આપવા જોઈએ, જેથી વધુ લોકોને આકર્ષિત કરી શકાય.'

(Facility of LCD should be established at each PHC or Anganwadi to attract maximum beneficiaries.)

It was suggested that there should be a large screen with projection facilities for attracting maximum beneficiaries. After experiencing technological advancement in healthcare especially data management, diagnosis, health education the FHWs strongly recommended that ASHAs and facilitators should be provided with TeCHO mobile. This would have synchronised work system among all public health care staff.

Discussion:

This section has reflected upon needs regarding additional Health Communication Strategies as expressed by the ASHAs for performing their duties *viz.*, Home-visit, visit Health institutes, planning and organising Village Health and Nutrition Day, attending Village Health and Sanitation Committee meeting; record-keeping and providing information to the concerned ASHA facilitators and Female Health Workers. ASHA Facilitators were found to have the least provision; therefore, they are in extreme need of uniform, ASHA kit and training for Health Communication Strategies. FHWs recommended the review of TeCHO software and system of record maintenance since they have to do a lot of duplication. In addition to it, they mentioned that projective facilities like LCD with screen need to be established at PHC and Anganwadi level.

The highest number of ASHAs expressed demand for Health Communication Strategies for planning and organising 'Village Health and Nutrition Day-*Mamta* day'. The probable reasons could be; they get the opportunity to interact with a maximum number of mothers, children and patients catering to their various health-related needs be it vaccination, contraception, counselling *etc. Mamta* day creates a platform for individual, group and mass level health promotion. Significant differences were observed amongst ASHAs belonging to different blocks and varied occupational skills. ASHAs representing Nasvadi and Bodeli blocks possessing excellent occupational skills needed more number of Health Communication Strategies.

Those ASHAs possessing excellent occupational skills had a high perception of the benefits of use and have been involved in more use of health communication activities. Therefore, they would have expressed their needs as higher as compared to their counterparts for *Mamta* day. Survey and FGD data surfaced their requirements elaborately, consisting variety of charts/posters, rallies, folk media (Bhavai), Television and smartphones specifically. It was emphasised during FGDs that pictures should be larger and more in number, local representation should be considered by using local words and graphics.

Thakur et al. (2017) reported similar trends 'There is enough scope of IEC through culture-specific activities e.g. *Baisakhi Mela, Guru Divas, Kabaddi matches, akhara, Arogya Melas*; District Health plan for IEC/BCC activities; annual action plan of VHSNC, and pooling of IEC budget for all national Health programmes.' Needs expressed for TV was well supported by Seo and Matsaganis (2013). They hypothetically established that TV was a more important instigator of health-related conversations with family and friends for a less educated group.

Given data reflecting knowledge of ASHAs regarding communication technology, Arya (2016) emphasised upon the development of a system for technology transfer to ASHAs as they wanted to attend a training programme on ICT if provided by the government. Communication technology design should be used for disseminating nutrition information to rural women by ASHA.

Florez-Arango et al. (2011) documented promising prospects for m-Health technologies in general and use of rich media clinical guidelines in cell phones in particular for improvement in CHW's work performance in developing countries.

Least demands for Health Communication Strategies were found for maintaining health records and birth-death data. This may be attributed to the kind of work to be done while performing this duty by the ASHAs. They were found to use ASHA diary, registers and *Mamta* Card (health card) for taking down and maintenance of data. Besides this, for informing about any birth-death, spread of epidemic or for an emergency to the concerned health officer, she uses a mobile phone. Therefore, while performing such duty she may not require many other communication approaches. However, findings also reflected that timely and sufficient supply of ASHA diary, *Mamta* card and registers were lacking most of the time.

Srishti and Raj (2018) noted that 'there is lack of information available to women on maternal health…and service providers also affirmed the crucial role of maternal health education to improve maternal health status and agreed that it could be more effective if generated through media tools, such as mobile phones.'

Kohli et al. (2015) shared that 'communication and problem-solving skills should be included in their training so that they can overcome the problems faced by them in the community and gain the faith of the community.'

Kapadia-Kundu (2012), recommended that job aids or tools tailored to the needs of health care workers at specific levels of the health system can be developed. The study identified five parameters for actionable information-language, timeliness, simplification, quality and accessibility for health care workers, public health practitioners, policymakers and researchers. Information needs are dynamic and encompass programmatic and service delivery information. ICTs, specifically mobile phones could have a profound effect on information access and use at the district and sub-district level, provided that the applications are designed with needs and situations of their users in mind.

ORG Centre for Social Research (2009) concluded that 'IEC materials should be in local language and reflect cultural sensitivity so that clients can identify themselves with the materials. The poster should have a rural and urban look. Strong monitoring is essential for supply and use.'

Sood et al. (2014) stressed upon reconsideration of traditional conceptualisation of mass media campaign for large scale community-based efforts. The campaign needs to employ and report on explicit theories of behaviour and social change to place evidence-based practices in the field.

Garai and Ganeshan (2010) based on their research noted 'multiple interactive systems are far more effective than single interaction system (mobile) and need to incorporate into BCC strategies.' Which means multimedia and multiple approaches be used to bring desired behavioural change. Nongmaitthem, R. (2014) also suggested NHM create awareness through an appropriate medium of communication in India.

Haq and Hafeez (2009) found a need for updated knowledge, better communication skills and interest in continue education from Lady Health Workers. Researchers highlighted upon requirements of better IEC materials, inculcated skills

for role plays on common difficult scenario, adequate and timely supply of IEC materials in Pakistan.

The health communication program managers should not only explicitly consider ethical guidelines in their decisions about implementation, but also should involve affected individuals and communities as active participants in decision making about each campaign. (Institute of Medicine, US, 2002). Similarly, Estrada, et al. (2018) established that participatory approach is promising in the integration of a cultural-centre approach to understand health and communication needs with an ecological approach to communication intervention in rural areas.

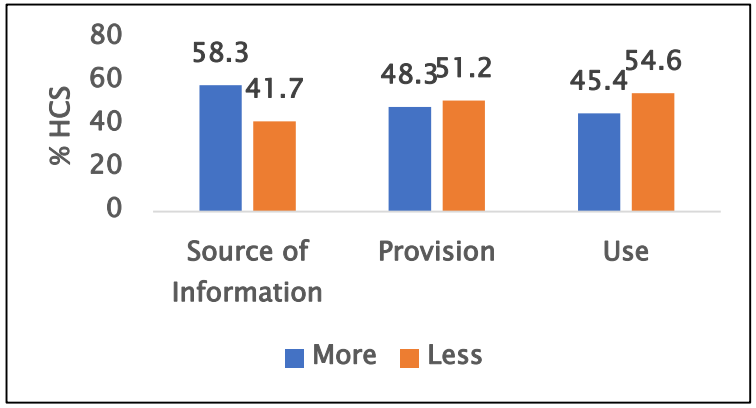
Therefore, the above findings and discussion lead towards the need for capacity building of the ASHAs for their IPC, selection and use of communication with beneficiaries. Moreover, policy planners should hire professionals in the field of Health Communication Strategies to develop a need-based strategic framework of Health Communication programme for National Health Mission to be implemented effectively up to grass-roots.

Mere production and provision of such strategic communication strategies will not solve the purpose of promotion and achieving health behaviour goals, but strong support system which supervises and monitor the use of communication strategies on the field with beneficiaries in various situations. The requirements and barriers presented by the grass-root level health volunteers like ASHAs and functionaries like ASHA Facilitators and Female Health Workers should be considered with utmost care and importance. It would be an ideal situation if they are also considered important partners while designing, producing and testing the communication plan.

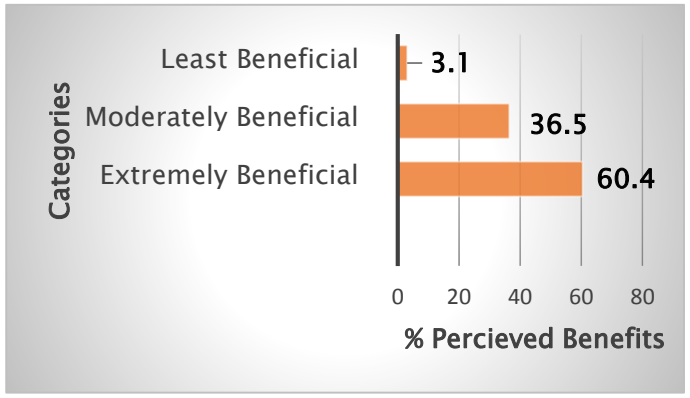
Figure 52

Results at a Glance

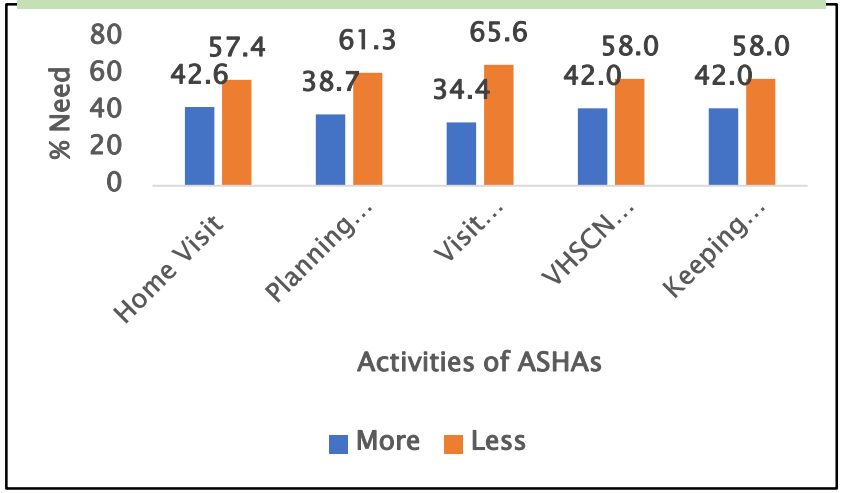
Categorisation of the ASHAs according to Sources of Information, Provision and Use of HCS



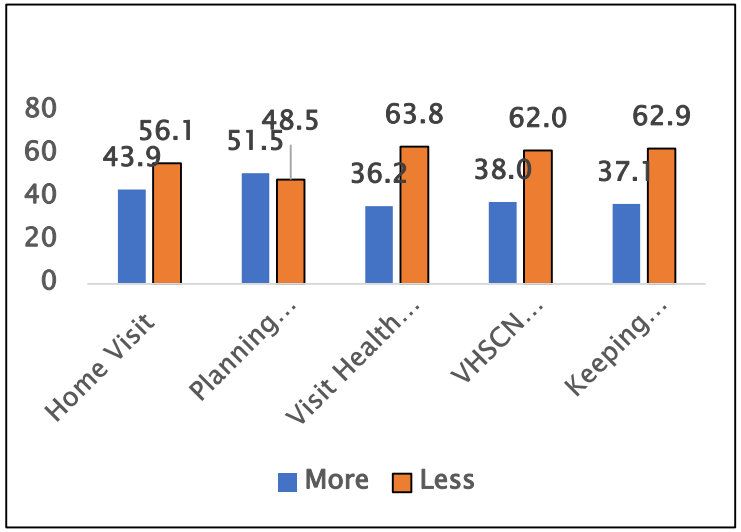
Categorisation of the ASHAs according to Perceived Benefits of HCS



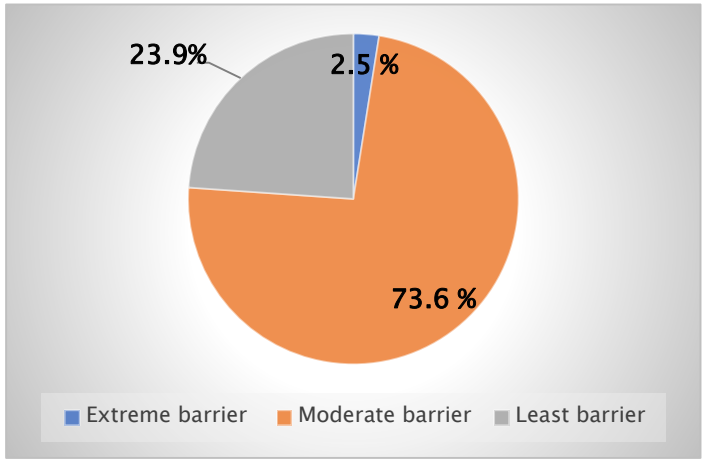
Categorisation of the ASHAs according to Activity wise Need of Additional HCS



Categorisation of the ASHAs according to Activity wise Use of HCS



Categorisation of the ASHAs according to Barriers related to HCS



Highlights of Recommendations of ASHAs, AFs, FHWs and CDHO

- Continuous Training, guidance and monitoring of HCS
- HCS should be strategically planned culture centric, tailor-made, having variety, innovative and large size pictures
- Promoting use of Folk forms
- Provision of Smart phones (TeCHO) to ASHAs and AF
- Provision of technical support for TeCHO
- Timely supply of ASHA kits and register no. 1-8