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# **A Comparative Analysis of Family Planning, Reproductive Health and, Maternal and Child Health, Knowledge, Attitudes and Practices (KAP) in 49 Hill and Mountain Districts of Nepal (2011-2015)**

**Ghar Ghar Maa Swasthya (GGMS) Project  
FHI 360, Nepal**

**July 2015**

This publication is made possible by the generous support of the American people through the United States Agency for International Development (USAID). The contents of this report do not necessarily reflect the views of USAID or the United States Government

## Acronym List

AIDS	Acquired Immune Deficiency Syndrome
AIDS	Acquired Immune Deficiency Syndrome
BCC	Behavior Change Communication
CEB	Children Ever Born
CPR	Contraceptive Prevalence Rate
CRS	Nepal CRS Company
eCON	CRS's Emergency Contraceptive Brand
ECP	Emergency Contraceptive Pills
FCHV	Female Community Health Volunteer
FHI 360	FHI 360
FM	Frequency Megahertz
FP	Family Planning
GGMS	Ghar Ghar Maa Swasthya (Healthy Homes)
GON	Government of Nepal
HIV	Human Immunodeficiency Virus
IR	Intermediate Result
IRB	Institutional Review Board
IUD	Intra Uterine Device
KAP	Knowledge, Attitudes, and Practices
LPG	Liquefied Petroleum Gas
MC	Municipality Committee
MCH	Maternal and Child Health
MWRA	Married women of reproductive age
NGO	Non-Government Organization
NRs	Nepalese Rupees
OCP	Oral Contraceptive Pills
ORS	Oral rehydration solution
PHC	Primary Health Center
PI	Primary Investigator
PPS	Probability proportional to size
PSU	Primary Sampling Unit
SD	Standard Deviation
SES	Socio Economic Status
SLC	School Leaving Certificate'
SPSS	Statistical Package for the Social Sciences
STI	Sexually Transmitted Illness
TA	Technical Assistance
TVC	Television Commercial
UMN	United Mission to Nepal
VDC	Village Development Committee

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## CHAPTER 1: INTRODUCTION

USAID/Nepal's *Ghar Ghar Maa Swasthya* (GGMS), or "Healthy Homes", project seeks to assist the Government of Nepal (GON) to expand the depth, reach, and impact of the private sector in social marketing for family planning (FP), maternal and child health (MCH), and HIV/AIDS prevention. GGMS is comprised of two components. A social marketing implementation component provides funding to the Nepal CRS Company (CRS) to achieve increased self-sustainability for performance of high quality social marketing activities and will focus on rural, hard to reach areas. The second component provides funding to GGMS to provide technical assistance (TA) to assist CRS in achieving increased self-sustainability and management capacity and to plan and design generic behavior change communication activities, as directed by USAID/Nepal. A key objective of the GGMS project is to increase the use of high-quality FP and MCH products and services in the project's 49 hill and mountain districts through private sector providers. This will contribute to the Government of Nepal's goal to reduce the number of unwanted pregnancies and to improve maternal and child health.

Key GGMS program outcomes include:

1. Increased sales of quality family planning services and selected maternal and child health services in rural and hard to reach areas
2. Increased sales of HIV/AIDS/STI prevention measures and treatment services in designated "hot zones"
3. Increased profit from sale of selected public health commodities
4. Selected strategic behaviors are changed with regard to the public health issues addressed with CRS products

### 1.1 STUDY OBJECTIVES

The primary objective of this study is to assess the family planning (FP), oral rehydration solution (ORS) and Zinc to determine the change in use of, as well as change in knowledge, attitudes, and practices related to, products and services for women and children health. A baseline study covering the program districts was conducted in July-August, 2011. This was followed by a follow-up survey conducted in June-July, 2013 and end-line study in March-April 2015. Results from these studies are intended to serve three purposes:

1. Provide indicators of GGMS performance measurement plan
  - **IR 4.1.1:** Percentage of currently married women of reproductive age (15 to 49 years) who are currently using a modern method of contraception.
  - **IR 4.1.2:** Percentage of currently married women of reproductive age (15 to 49 years) who know where to get Oral Rehydration Solution (ORS)

2. Provide more recent information to compare with baseline.
3. Inform the development of and/or changes to program strategies to better achieve the objectives of the GGMS project.

Primary outcomes of this study include:

1. Changes in use of quality family planning services and selected maternal and child health services in rural and hard to reach areas; and
2. Changes in knowledge, attitudes, and practices (KAP) with regard to the public health issues addressed with Nepal CRS Company products.

Measures will include:

1. Current use of FP, emergency contraceptives, ORS and zinc products and services
2. KAP related to selected FP, ORS and zinc products and services and their availability;
  - This includes media habits and awareness of existing FP, ORS and zinc related health messages.
3. Willingness to pay for selected FP, ORS and zinc products
4. Zinc use among children with diarrhea under 5 years of age according to selected socio-economic, demographic, and household characteristics

## **1.2 RESEARCH DESIGN AND METHODS**

### **1.2.1 RESEARCH METHODOLOGY**

The method of the study was of applied research in the sense that the information generated will be used to revise the FP, ORS and zinc programs to increase the usage rates of products and services related to these aspects of women's and children's health. Information required for the purpose of the study was collected using quantitative techniques, an interviewer – administered questionnaire. The study population represented 49 'hard-to-reach' districts covered by GGMS Project.

### **1.2.2 INSTRUMENT**

The study was conducted using a structured questionnaire leading to quantitative information generation and administration to married women of reproductive age (MWRA) between '15 to 49 years' from the study areas of the hill and mountain districts. The key information collected from the women by using questionnaire was as follows:

- 1 Socio-economic and demographic characteristics
  - Age, ethnicity, literacy status
  - Marital status and number of living children

- Housing condition, household possessions and access to drinking water and sanitation facilities
- 2 Knowledge and use of family planning and ORS/zinc products
    - Knowledge of FP, ORS and Zinc products including places of availability
    - Current and past use of FP, ORS and Zinc products
    - Reasons for use and non-use of FP, ORS and Zinc products
    - Behavioral determinants of FP, ORS and Zinc products use and discontinuation
    - Attitudes towards modern contraceptives, including willingness to (continue to) use in the future
    - Attitudes towards ORS and zinc during childhood diarrhea
    - Willingness to pay for FP, ORS and zinc products
  - 3 Media habits and awareness on FP, ORS and zinc
    - Exposure to electronic media including frequency of use and preferred channels and programs
    - Exposure to existing FP, ORS and zinc messages
    - Sources of information regarding existing FP, ORS and zinc messages

### 1.2.3 STUDY AREA

This study represents all the 49 districts (16 mountains and 33 hills) which the GGMS/ project cover. These districts were the ones USAID included in the project contract.

### 1.2.4 SUBJECT POPULATION

The target group for this study included currently married women between 15-49 years of age in 49 ‘hard-to-reach’ hill and mountain districts of Nepal. In 2011, a representative sample of 1800 all women (irrespective of marital status) aged 15-49 were randomly drawn from the ‘hard-to-reach’ 16 mountain and 33 hill districts. In the follow-up surveys in 2013 and 2015, a representative sample of 1620 currently married women aged 15-49 years was randomly drawn from the ‘hard-to-reach’ 16 mountain and 33 hill districts.

### 1.2.5 SAMPLING AND RECRUITMENT

**Sample size justification:** Information about currently married women aged 15-49 was gathered using a multi-stage stratified cluster sampling strategy similar to that adopted in the first round (baseline) and follow-up studies<sup>1</sup>. The sample was representative of all women in

<sup>1</sup> In the 2011 baseline study, 15 districts (5 districts from mountain and 10 from hills) were first selected, followed by selection of clusters (wards) within those districts. FHI 360 Scientific Affairs Committee suggested that directly selecting amongst all clusters would increase the representativeness of the sample and this approach was used in 2013 follow-up study. However, it was realized that directly selecting from among all clusters sample characteristic would not be comparable with the baseline, so the sampling procedure followed during baseline is followed for this end line study as well. The procedure to select households in each cluster and female respondents from those households is the same across all the studies.

2011 and currently married women in 2013 and 2015 in program area (16 mountains and 33 hills hard to reach districts in Nepal).

The sample size – in each study was calculated based on the following information/assumptions:

1. The primary outcome of interest is the modern contraceptive use (in percent) among currently married women in the program area (33 hills and 16 mountain districts of Nepal).
2. This follow-up study is designed to carry-out an evaluation after about five years since the baseline, and, at this time, the percentage reporting to use a modern method of contraceptive is expected to increase by five percent. If that (or a higher level of increase) occurs, then the evaluation will have a power of 80 percent, and a Type 1 error of five percent, to detect that level of change. Any real change of less than 5 percent will not be able to be measured.
3. The appropriate sample size formula for measuring change over time is:

$$N = \frac{deff \times \left[ Z_{1-\alpha} \sqrt{2 \cdot P(1-P)} + Z_{1-\beta} \sqrt{P_1(1-P_1) + P_2(1-P_2)} \right]^2}{(P_2 - P_1)^2}$$

4. The population distribution from the recent census shows that about 20% of the total population in the program area lives in the 16 mountain districts. Accordingly, 20% in this sample was recruited from mountains and 80% from the hills.

## 1.2.6 SAMPLING DESIGN

The sample design in the baseline-end line was different than in the mid-line, although all other steps to recruit the respondents was identical in all three surveys.

### 1.2.6.1 BASELINE AND END-LINE DESIGN:

The GGMS program covers 49 districts: 16 mountain and 33 hill districts. From these districts, five districts from mountain stratum and 10 from hills were selected systematically. For selecting the districts from each of the mountain and hills areas, districts were listed separately in numerical order starting from the eastern development region to the far western development region. Then required numbers of districts were selected using systematic random technique from each of the mountain and hills stratum. A list of the fifteen districts were selected through this process.

Sixty clusters (wards) – 13 from mountain and 47 from hills - were selected randomly from the previously identified 15 districts (5 mountain and 10 hills). A ward was considered as the primary sampling unit (PSU) for the study. A ward in a Village Development Committee (VDC) or municipality (MCs) was treated as a cluster. Therefore, in selecting the wards (clusters), all the VDCs/MCs of the previously selected five mountain and 10 hills districts were listed separately

in alphabetical order together with the number of households in each ward. Then 60 clusters (13 clusters from mountain and 47 from hills) were selected following probability proportional to size (PPS) method from the list prepared for the study purpose. Selection of the clusters was done in Kathmandu using the 2001 Census Data of the Central Bureau of Statistics.

#### **1.2.6.1 MIDLINE DESIGN:**

The design for the survey was a stratified probability sampling design for which a three stage stratified cluster sampling was employed including selection of clusters (primary sampling units or PSUs), households and individuals. The study covered both the mountain and hill strata of all five development regions.

### **1.2.7 SAMPLING PROCEDURE**

#### **1.2.7.1 SELECTION OF CLUSTERS (WARDS):**

The GGMS program covers 49 districts: 16 mountain and 33 hill districts. A ward was considered as the PSU for the study. A ward in a Village Development Committee (VDC) or municipality (MCs) was treated as a cluster. Therefore, in selecting the wards (clusters), all the VDCs/MCs across all eligible districts were listed separately in serpentine fashion (the hill districts from east to west and the mountain districts from west to east) together with the number of households in each ward. Then required clusters were selected following the probability proportional to size (PPS) method from the list prepared for the study purpose. Selection of the clusters was made in Kathmandu using the most recent available Census Data of the Central Bureau of Statistics.

#### **1.2.7.2 SELECTION OF HOUSEHOLDS**

The field team prepared a sketch map of each sampled cluster (ward/s) delineating mainly the public places, villages/settlements, forests, rivers, trails and so on prior to proceeding for the data collection activity. This was done in consultation with the local leaders and key informants including female community health volunteers (FCHVs) of the sampled cluster. The purpose of preparing such a sketch map was to locate the settlements within the cluster and to familiarize the survey team with the geography of the cluster. Following this, a complete list of households was prepared in each settlement. It was estimated that at least 75 households was required to interview 30 women aged 15-49 years. Therefore, if a ward had less than 75 households an adjoining ward was combined to constitute a cluster in order to reach the desired number of sample respondents. Similarly, if a ward had more than 150 households, the ward was further segmented into sub-wards of approximately equal numbers of households and one segment was selected randomly for information collection.

In the next step each household in the sampled cluster was visited and asked any knowledgeable person in the household about how many eligible women reside in that household and their ages. Based on the responses, a sample frame of households with at least one eligible woman was prepared from the selected cluster. From this list, 30 households were selected randomly.

### 1.2.7.3 SELECTION OF RESPONDENT

One MWRA aged 15-49 years old was selected from each sampled household. In case of more than one eligible woman present in the sampled household, only one woman was chosen from the available number of eligible women for interview using a Kish grid, which used a pre-assigned table of random numbers to select one person to be interviewed from among multiple eligible people. A total of 30 eligible respondents from a sampled cluster were interviewed.

Table 1.1 illustrates the comparison of the sample size in the baseline and follow-up studies. The total sample size in 2011 was 1800 in which 1380 were currently married women. In the follow up study in 2013 and 2015, the total sample was 1620 comprising of only currently married women.

**Table 1.1 Sample sizes in the mountain and hill districts by type of respondents in 2011, 2013, and 2015**

S. No.	Description	Mountain			Hill			Both		
		2011	2013	2015	2011	2013	2015	2011	2013	2015
1	Number of sampled districts	5	11	4	10	32	10	15	43	14
2	Number of clusters	13	11	12	47	43	42	60	54	54
3	Number of women of reproductive age (approx.)	390	330	360	1410	1290	1260	1800	1620	1620
4	Currently Married women	305	330	360	1095	1290	1260	1400	1620	1620

### 1.3 INFORMED CONSENT

Researchers obtained consent from each participant before information was collected. In the case of married women aged 15-17, consent was obtained from the parent/guardian first for the young woman to participate and then assent also from the participant. In the event that respondents were not literate, the informed consent/assent form was read to them, and consent/assent was obtained from each respondent (and parent/guardian for those under 18 years) before information was collected.

The forms informed all respondents of the purpose of the study, the benefit and risk to them and the fact that their participation was voluntary and that they could ask to stop the process at any point of time. The forms indicated that minimal risk was expected from participating in this study, except possible discomfort in answering some questions. They assured respondents that all information would be confidential and that no names or identifying information would be used in any reports resulting from the study.

Researchers asked all respondents, plus parent/guardian for those under 18, to sign or make a mark on an informed consent/assent form that details all this information; the researchers countersigned the consent form. Respondents were not paid for participation.

## **1.4 DESIGN AND PRE-TESTING OF SURVEY QUESTIONNAIRE**

The final draft of the questionnaire was translated into Nepali and pre-tested by the enumerators during their last stage of training (which also served as a practical exercise before embarking for the actual data collection). The pretesting was conducted in a Village Development Committee (VDC) adjoining Kathmandu and Lalitpur not included in the sample. A total of 40 questionnaires were administered during the pretest. This pre-testing helped in detecting problems in wording, flow of questions and response coding. The pre-testing also helped to illuminate potential issues that may arise in the actual fieldwork which were specifically addressed in the training. Based on the field-testing result, final adjustments to the instrument were made in collaboration with GGMS; and approval from GGMS for the final survey instrument was taken. The Nepali translation of the instrument was added to the IRBNet package prior to initiation of fielding.

## **1.5 FIELD ORGANIZATION AND DATA COLLECTION**

In each round of the study, a 5-days enumerator-supervisors training was conducted just before the data collection was started. The participants consisted of enumerators (all female), supervisors, research assistants, data manager, data processing staffs, scrutinizing and coding staffs, and interns from FHI360. The training was held in a venue organized by the research implementing vendors.

The training program focused on the GGMS project, the research objectives, study design, sampling strategy, questionnaire, informed consent, research ethics and field practices. All training exercises were conducted in Nepali. The FHI 360 GGMS Monitoring and Evaluation Advisor was present throughout the training to clarify, elaborate and explain the questions raised by the participants and lead the research ethics training that include: fundamental principles of human research ethics, informed consent and the essential elements: research description, risks, benefits, confidentiality, contacts, and voluntary Participation, and researcher's responsibilities.

The teams for the fieldwork were planned as per 2:1 team size. On an average, each team had 1 Supervisor and 2 Enumerators.

The survey was designed by the FHI 360 research team and carried out by implementing research organization outsourced by GGMS. Supervisors and enumerators engaged in the studies had considerable experience in carrying out similar surveys in field research settings. The enumerators were also given a manual which provided instructions and explanations for each question in the survey. The manual was designed to make it easy for enumerators to refer to it in the field.

During the fielding, the implementing vendor of the respective studies routinely (everyday through telephone to each team) monitored the data collection team from Kathmandu.

Additionally research Manager from the research implementing vendors and the Monitoring and Evaluation Advisor from FHI360 GGMS conducted spot checks in selected data collection sites.

## **1.6 DATA PROCESSING AND ANALYSIS**

The data processing team was comprised of Data Manager, Scrutinizing and Coding staffs and Data Entry staffs. The data processing was carried out after the data collection forms were collected and edited in the office of the vendor.

The Data Manager developed a data entry and cleaning program after the questionnaire was finalized. The data entry program was created using the FoxPro software. In order to maintain the quality of the data, legal codes check, authorized range check, skip patterns and extreme case check systems were developed in the data entry program. Data were entered/processed using FoxPro database and SPSS software packages. SPSS system file was prepared for output generation and analysis.

During the data entry, the Monitoring and Evaluation Advisor from FHI360 GGMS regularly monitored the data entry structure design, data entry, data cleaning and tabulation. Data quality was insured through consistency checks, range checks and value and variable label checks through frequency tables and cross tabulation of selected variables. Corrections, where needed, were done by revisiting the hard copy of the questionnaire.

## **1.7 PRESENTATION OF RESULTS**

The results presented will focus on comparison between the baseline (2011) and the end-line (2015) data and when discussed will be directional (higher or lower) as well as reported as changing (increased or decreased) where possible.

## CHAPTER 2: RESPONDENT PROFILE

### 2.1 CHARACTERISTICS OF RESPONDENTS

#### 2.1.1 AGE, ETHNICITY AND RELIGION

##### 2.1.1.1 AGE

In all surveys, the majority of respondents were aged 30 to 49 years, followed by aged 20 to 29 years and aged between 15 and 19 years. The mean age in 2011 was 29 increased to 31 in 2013 and 2015 with a median of about 30 years in all surveys. In 2013, respondents in the mountains were more likely to be younger, which was other way around in 2011 and 2015 compared to 2013.

**Table 2.1 Percentage distribution of currently married women aged 15-49 years by their age and ecological regions**

Age category	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
15 to 19	7.2	5.8	5.0	5.9	4.5	4.6	6.2	4.8	4.7
20 to 29	41.6	45.5	46.9	46.6	39.1	43.2	45.5	40.4	44.0
30 - 49	51.1	48.8	48.1	47.5	56.4	52.2	48.3	54.9	51.3
<b>Mean</b>	<b>30.0</b>	<b>29.4</b>	30.6	<b>29.0</b>	<b>31.4</b>	31.1	<b>29.0</b>	<b>31.0</b>	31.0
<b>Median</b>	<b>30.9</b>	<b>28.0</b>	29.0	<b>30.2</b>	<b>30</b>	30.0	<b>30.3</b>	<b>30.0</b>	30.0
<b>SD</b>	<b>8.9</b>	<b>7.63</b>	8.4	<b>8.0</b>	<b>7.98</b>	8.2	<b>8.2</b>	<b>7.94</b>	8.3
<b>Total</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

##### 2.1.1.2 ETHNICITY AND RELIGION

In 2013, 'Brahmin/Chhetri' was the dominant ethnic group, with 40.4% of respondents belonging to this group. 30.8% of total were 'Janajati'. 'Dalits' occupied 17.6%, 5.1% were 'Newars' and the rest of the ethnic groups represented 6.1% of the total.

In the mountains, respondents were somewhat more likely to be Brahmin/Chhetri (38%) and somewhat less likely to be Janajatis (30%). The 2011 sample, in contrast to 2013, was most likely to be Janajati (42 versus 40%), followed by Brahmin/Chhetri (21 versus 24%). The distribution of the population by caste/ethnicity of 2011 and 2015 surveys shows similar pattern than in 2013.

The vast majority of the respondents, in all three surveys followed Hindu religion. However, respondents from the mountains were more likely to be Buddhist than from Hills.

**Table 2.2 Percentage distribution of currently married women aged 15-49 years by ethnicity, religion and ecological regions**

Description	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Caste/Ethnicity</b>									
Brahmin/Chhetri	20.7	38.2	24.4	38.9	40.9	40.7	34.9	40.4	37.1
Janajati	42.3	30.0	40.8	44.2	31.0	42.3	43.8	30.8	42.0
Dalits	27.2	17.0	29.4	12.1	17.8	11.6	15.4	17.6	15.6
Newars	9.8	8.2	5.3	4.7	4.3	5.4	5.9	5.1	5.4
Others	--	6.7		--	6		--	6.1	
<b>Religion</b>									
Hindu	65.6	83.9	61.7	80.9	89.5	85.8	77.6	88.3	80.4
Buddhist	27.2	11.5	33.1	10.0	5.7	8.4	13.7	6.9	13.9
Islam	--	0.0	0.0	--	0.5	0.1	--	0.4	0.1
Kirat	5.2	2.7	3.9	8.4	3.4	4.8	7.7	3.3	4.6
Christian	2.0	1.8	1.4	0.7	0.8	0.9	1.0	1.0	1.0
No response	00	0.0		00	0.1		00	0.1	
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

### 2.1.2 LITERACY AND EDUCATIONAL ATTAINMENT

In 2011, only 43% of the women were literate as determined by asking them to read a written sentence. The level of literacy in 2015 has increased to 58 %. Literacy among women in Mountain was lower than in the Hills. However, proportion of educated women in each level of education is higher in hills than in mountains.

**Table 2.3 Percentage distribution of currently married women aged 15-49 years by literacy status and ecological regions**

Description	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Literacy status</b>									
Illiterate	72.8	62.7	57.5	53.2	44.7	37.1	57.4	48.3	41.6
Literate	27.2	37.3	42.5	46.8	55.3	62.9	42.6	51.7	58.4
<b>Level of education</b>									
No schooling/Illiterate	69.5	61.5	55.3	49.0	43.4	39.1	53.5	47.1	42.7
Some primary	13.8	14.8	18.6	19.0	20.6	20.2	17.9	19.4	19.9
Some secondary	9.5	13.3	16.9	18.7	15.0	22.5	16.7	14.7	21.3
SLC or above	7.2	10.3	9.2	13.2	20.9	18.1	11.9	18.8	16.1
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

### 2.1.3 OCCUPATION

The two main occupations among total respondents in all three surveys were housewife/home worker and farmer/herder, with mountain respondents in 2013 and 2015 in reverse order.

**Table 2.4 Percentage distribution of currently married women aged 15-49 years by occupation and ecological regions**

Occupation	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Housewife/Home Worker	64.9	44.5	52.2	67.6	46.0	61.4	67.0	45.7	59.4
Farmer/ Herder	28.2	49.7	45.0	26.7	41.2	30.4	27.0	42.9	33.6
Student	1.3	1.5	0.8	1.6	1.9	0.8	1.6	1.8	0.8
Retail sales	4.3	2.1	0.6	1.6	3.6	2.1	2.2	3.3	1.8
Self-employed / Small Business Owner	0.7	0.0	0.0	0.6	4.7	2.5	0.6	3.8	1.9
Government Employee	0.3	1.5	0.8	0.9	1.1	1.2	0.8	1.2	1.1
Unemployed /Looking for work	-	0.3	0.0	0.2	0.3	0.1	0.1	0.3	0.1
Skilled/ Technical Worker	-	0.0	0.3	0.1	0.2	0.7	0.1	0.1	0.6
Maid	0.3	0.3	0.0	0.1	0.2	0.1	0.1	0.2	0.1
Executive/Managerial/Professional	-	0.0	0.3	0.1	0.6	0.6	0.1	0.5	0.5
Others (Labor)	-	0.0	0.0	0.5	0.2	0.2	0.4	0.2	0.1
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

## 2.1.4 MIGRATION

The great majority of respondents (over 80 % of total) indicated that they have lived in the same district all their lives. About 7- 9% said they'd been in the district for 10 or more years, with only about 8% reporting less than 10 years, indicating a highly stable population of respondents.

**Table 2.5 Percentage distribution of currently married women aged 15-49 years by respondent's duration of stay in the district and ecological regions**

Duration of stay in this district	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Less than one year	1.6	1.5	0.8	0.9	0.7	0.7	1.1	0.9	0.7
1-4 years	3.0	1.2	6.1	3.7	3.3	3.2	3.6	2.8	3.8
5-9 years	2.3	3.0	3.3	3.7	3.7	2.6	3.4	3.6	2.8
10 years or more	6.2	6.4	4.7	7.5	9.1	7.9	7.2	8.6	7.2
all my life	86.9	87.9	85.0	83.5	83.1	85.6	84.5	84.1	85.5
Do not know	-	0.0	-	0.3	0.1	-	0.2	0.1	-
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

Only about 60% of husbands lived in the area all-year round. However, over the years, proportion of husbands living in the same area in mountains is slightly declining (76 % to 63 %). The largest percentages of husbands who live there all year were there less than one month in the last year (31 % to 44 %).

**Table 2.6 Percentage distribution of currently married women aged 15-49 years by migration status of their husband and ecological regions**

Whether husband live in this area all year round	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Yes	76.1	66.4	62.8	57.4	63.2	57.9	61.4	63.8	59.0
No	23.9	33.6	37.2	42.6	36.8	42.1	38.6	36.2	41.0
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>
<b>Number of months of the last year husband living in this area</b>									
Less than one month	24.7	45.0	40.3	31.9	38.6	42.6	30.9	39.8	43.5
1-2 months	30.1	11.7	3.0	30.2	15.7	13.0	30.2	14.9	11.3
3-4 months	17.8	17.1	14.2	18.2	24.2	19.6	18.1	22.8	19.1
5-6 months	15.1	12.6	14.2	11.8	12.9	12.6	12.2	12.9	13.4
7 months or more	8.2	13.5	28.4	6.2	8.7	12.1	6.5	9.6	15.8
Do not know	4.1	-		1.7	-		2.0	-	
Mean	2.7	3.2	3.9	2.3	3.1	2.8	2.3	3.1	3.0
Median	2.0	2.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0
SD	2.6	2.9	3.6	2.4	2.5	2.9	2.5	2.6	3.0
<b>Total</b>	<b>73</b>	<b>111</b>	<b>134</b>	<b>467</b>	<b>472</b>	<b>530</b>	<b>540</b>	<b>583</b>	<b>664</b>

## 2.2 ECONOMIC STATUS

### 2.2.1 SOCIO ECONOMIC STATUS INDEX

The socio economic status (SES) index is composed of items a household possesses as well as source of drinking water, sanitation, cooking and housing conditions. The SES index for 2015 and 2011 shows that more respondents from hills than mountains (22.8 vs 10.3 and 21% vs. 10.8%) were in the richest quintile, while more of those in 2013 from the mountains were in the fourth richest quintile (38.5 vs 15.7 %). Overall, the data shows that proportion of poor in the mountains are relatively large compared to their counterparts in the hills.

**Table 2.7 Percentage distribution of currently married women aged 15-49 years by their socio economic status index and ecological regions**

SEX index	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Poorest	25.9	19.4	32.2	21.6	20.2	16.3	22.6	20.0	19.8
Second	17.7	15.8	22.2	21.1	21.0	19.5	20.4	19.9	20.1
Third	24.3	21.8	17.5	18.0	19.2	20.8	19.4	19.8	20.1
Fourth	21.3	38.5	17.8	18.1	15.7	20.6	18.8	20.3	20.0
Richest	10.8	4.5	10.3	21.2	24.0	22.8	18.9	20.0	20.0
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

### 2.2.2 POSSESSION OF HOUSEHOLD ITEMS

Majority of the respondents had a bed and mobile telephone and between one-half and two-thirds had *dhiki* and/or *janto*, radio, and electricity. About 24 to 36 % had a television and

about 32 to 40% had table and chair. Ten percent or less had a sofa, fan, non-mobile telephone, refrigerator or computer. The proportion of respondents possessing the selected household items, except for Radio, fan, clock and *dhiki/janto* between 2011 and 2015 have increased. Possession of each item was higher in the hills than in the mountains.

**Table 2.8 Percentage distribution of currently married women aged 15-49 years by types of household items and ecological regions**

Household items	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Radio	51.5	47.6	46.9	65.8	58.5	61.6	62.6	56.3	58.3
Television	20.7	19.7	29.4	24.7	35.0	37.8	23.8	31.9	35.9
Mobile telephone	58.0	77.3	85.3	72.1	90.0	95.7	69.0	87.4	93.4
Electricity	50.8	60.0	75.0	50.0	65.2	92.4	50.2	64.1	88.5
Non-mobile telephone	4.6	3.0	1.1	4.3	8.5	4.9	4.4	7.4	4.1
Refrigerator	1.3	0.9	1.1	3.8	6.7	6.0	3.3	5.5	4.9
Table	26.6	28.8	30.6	34.2	43.3	46.2	32.5	40.3	42.7
Chair	30.2	28.2	27.2	34.1	44.4	44.1	33.2	41.1	40.4
Bed	75.1	87.0	80.6	86.8	89.7	92.4	84.3	89.1	89.8
Sofa	4.6	3.3	1.9	9.0	11.6	11.4	8.1	9.9	9.3
Computer	0.3	3.0	2.8	2.1	7.6	8.1	1.7	6.7	6.9
Clock	60.0	26.4	42.5	72.4	38.4	71.7	69.7	36.0	65.2
Fan	2.0	3.0	2.5	8.8	9.9	11.9	7.3	8.5	9.8
Dhiki/janto§	49.5	50.0	41.1	70.4	56.7	62.4	65.9	55.3	57.7
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

§Dhiki= wooden equipment use for husking rice; Janto= traditional stone grinder

### 2.2.3 SOURCE OF DRINKING WATER

**Table 2.9 Percentage distribution of currently married women aged 15-49 years by source of drinking water and ecological regions**

Source of drinking water	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Pipe water</b>									
Public tap/standpipe	43.9	49.4	47.8	44.8	39.5	49.6	44.6	41.5	49.2
Piped to yard/plot	23.0	12.4	43.6	23.7	20.7	33.4	23.5	19.0	35.7
Tube well or borehole	-	0.0		1.8	0.3		1.4	0.2	
Piped into house	-	1.2	2.5	0.8	5.9	1.9	0.6	4.9	2.0
<b>Dug Well</b>	-	-	0.0	0.1	-	0.3	0.1	-	0.2
<b>Water from spring</b>									
Protected spring	29.5	14.2	3.3	18.7	15.0	6.7	21.1	14.8	5.9
Unprotected spring	0.3	0.9	2.5	7.9	9.1	1.7	6.3	7.5	1.9
<b>Surface water (river/dam)</b>									
Lake/pond/stream/canal/ irrigation canal)	2.6	11.2	0.0	1.1	8.8	2.8	1.4	9.3	2.2
Stone tap/dhara	0.7	10.6	0.0	0.3	0.3	0.6	0.4	2.4	0.5
<b>Others:</b>									
Tanker truck	-	0.0		-	0.1		-	0.1	
Bottled water	-	0.0		-	0.2		-	0.1	
Others	-	0.0	0.3	0.7	0.1	3.0	0.6	0.1	2.4
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

The most common source of water was public tap/standpipe, followed by water piped to yard, protected/unprotected spring, lake/ pond, and piped into the house. Less than 3 of overall respondents obtained water from a stone tap/dhara.

Results from all surveys show that respondents had a higher percentage getting water from all of the top two sources (public tap/standpipe, and water piped to yard) and a lower percentage from lake/pond etc. and piped into the house.

## 2.2.4 SANITATION

Results on Sanitation were significantly different from those in 2011, 2013 and 2015. The one most used toilet facilities in 2013 was flush to septic tank, where the one most used toilet facility in 2011 and 2015 was ventilated improved pit latrine. Proportion of those who had no facility/bush/field in 2015 was remarkably low compared to 2011 and 2013. Pit latrine with slab stands in the second position among the types of toilet facility used in the study except in 2011.

**Table 2.10 Percentage distribution of currently married women aged 15-49 years by type of toilet facility in their household and ecological regions**

Type of toilet facility used in the household	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Flush or pour flush toilet</b>									
Flush to piped sewer	-	0.9		0.2	1.4		0.1	1.3	
Flush to septic tank	-	47.9	0	0.6	36.4	0.6	0.5	38.7	0.5
Flush to pit latrine	0.4	10.9		0.6	12.1		0.6	11.9	
Flush to somewhere else	-	1.6		0.7	1		0.5	1.1	
Flush, do not know where	-	0		0.2	0.1		0.1	0.1	
<b>Pit latrine</b>									
Ventilated improved pit latrine	40.3	2.7	87.2	37.1	5.7	87.7	37.8	5.1	87.6
Pit latrine with slab	12.1	10	3.9	10.2	23.5	4.0	10.6	20.7	3.9
Pit latrine without slab/	10.8	3	4.5	12.4	3.8	2.2	12.1	3.6	2.8
Composting toilet	-	0.9		1.4	0.5		1.1	0.6	
Bucket toilet	-	0		-	0.1		-	0.1	
<b>No facility/bush/field</b>	36.4	22.1	4.4	36.6	15.4	5.5	36.6	16.8	5.2
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

## 2.2.5 COOKING BEHAVIORS

In all surveys, the great majority of respondents (94, 86 and 90 %) used wood for cooking, followed distinctly by LPG. Use of biogas for cooking was confined to hills.

In terms of how food was cooked, majority (just over two-thirds) used a *chulo*. In mountains very few used LPG and Biogas to cook food compared to hills.

The proportion of respondents saying to have a separate room for the kitchen in 2015 has increased to 65 % from 56 % in 2011. In contrast, proportion of respondents saying to have a separate room for cooking in mountain has declined to 56 % in 2011 from 59 % in 2015.

**Table 2.11 Percentage distributions of currently married women aged 15-49 years by types of fuel used for cooking and ecological regions**

Type of fuel used for cooking	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Wood	100.0	98.8	96.7	92.7	82.5	87.7	94.3	85.8	89.7
LPG	-	0.9	3.1	5.4	12.6	10.8	4.2	10.2	9.1
Biogas	-	0.3	0.3	1.6	4.6	1.5	1.3	3.7	1.2
Coal, lignite	-	0.0		0.1	0.1		0.1	0.1	
Others (Husk) <i>Bhuse Chulo</i>	-	0.0		0.2	0.1		0.1	0.1	
Natural gas		0.0			0.2			0.1	
Charcoal		0.0			0.1			0.1	
<b>Ways of cooking food</b>									
<i>Chulo</i>	67.5	70.0	98.1	71.1	66.8	87.1	70.4	67.5	89.5
Open fire	31.1	28.8	1.9	21.4	16.4	1.2	23.5	18.9	1.4
LPG gas	-	0.3	0.0	7.0	9.8	11.1	5.5	7.8	8.6
Stove	1.3	0.6	0.0	0.5	4.3	0.6	0.6	3.5	0.5
Bio-gas		0.3			2.7			2.2	
<i>Bhuse Chulo</i>		0.0			0.1			0.1	
<b>Is separate room used for kitchen</b>									
Yes	59.3	44.5	55.6	54.9	66.3	68.0	55.9	61.9	65.2
No	40.7	55.5	44.4	45.1	33.7	32.0	44.1	38.1	34.8
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

## 2.2.6 HOUSING CONDITION

Earth or mud was the most common flooring material used in the households (74 to 91 %). This was followed by cement.

Stone with mud was predominantly used for walls, followed by cement in 2013 and 2015, and Bamboo with mud in 2011.

**Table 2.12 Percentage distribution of currently married women aged 15-49 years by types of material used to construct their house and ecological regions**

Main material used For the floor	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Natural floor</b>									
Earth/mud	96.5	80.6	94.4	89.3	72.0	85.4	90.8	73.8	87.4
Dung	1.3	10.6		1.1	9.4		1.1	9.6	
<b>Rudimentary floor</b>									
Wood planks	0.3	5.5		0.5	0.5		0.5	1.5	
<b>Finished walls</b>									
Cement	2.3	3.0	5.6	9.0	17.2	14.6	7.6	14.3	12.6
Carpet		0.3			0.8			0.7	
<i>Gundri</i>		0.0			0.1			0.1	
<b>Main material of the exterior walls</b>									
<b>Natural walls</b>									
Mud/sand	0.7	3.0	0.0	2.7	0.7	0.4	2.3	1.2	0.3
No walls		0.3		0.3	0.0		0.2	0.1	
<b>Rudimentary walls</b>									
Stone with mud	92.1	85.5	90.8	74.2	77.6	74.9	78.1	79.2	78.5
Bamboo with mud	3.3	3.0	1.4	7.9	1.8	3.7	6.9	2.0	3.1
Reused wood			0.0	1.2		0.1	0.9		0.1
<b>Finished walls</b>									
Cane/palm/trunks		0.9			0.5			0.6	
Wood plank	0.3		0.0	3.7		4.6	3.0		3.6
Stone with lime/cement	1.3	3.9	0.6	2.3	4.5	1.6	2.1	4.4	1.4
Bricks		0.0	0.0	1.9	1.6	2.8	1.5	1.2	2.2
Cement blocks		1.8	0.3	1.5	1.2	0.5	1.1	1.4	0.4
Corrugated iron sheet	0.3			0.5			0.5		
Wood with mud									
Cement	2.0	0.3	5.8	3.7	11.6	9.8	3.3	9.3	8.9
Plywood		0.6			0.3			0.4	
Bamboo		0.6			0.0			0.1	
Galvanized Tin		0.0	1.1		0.3	1.7		0.2	1.6
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

## CHAPTER 3: MEDIA EXPOSURE AND HABITS

### 3.1 RADIO

Over half of the respondents in 2011 and 2013 in mountains (58 and 60%) said they never listen to the radio, which in 2015 was reported by only 34 %. Similarly, 37 % and 53 % in the hills in 2011 and 2013 said that they never listen to radio, which in 2015 was reported by only 21 %. This indicates that proportion of women listening to radio over time is increasing.

Those who said to own radio in mountains in 2011, 2013, and 2015 were 52, 48 and 47 % compared to 66, 59 and 62 % in hills in respective years (Table 2.8). This indicates that the proportions of household that own radio are decreasing over the years. On the other hand, proportions of women who listen to radio are increasing. This is explained in Table 3.3 that more and more women are listening to radio outside their homes in recent years.

The analysis also reveals that proportions of women listening radio regularly is consistently higher in hills as compared to mountains.

**Table 3.1 Percentage distribution of currently married women aged 15-49 years by the frequency of listening to radio and ecological regions**

Frequency of listening to the radio	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Not at all	58.0	60.3	34.2	36.5	52.7	20.5	41.2	54.3	23.5
Less than once in 2 weeks	7.5	1.5	15.8	6.4	0.4	9.2	6.6	0.6	10.7
About once every 2 weeks	3.0	2.1	5.6	2.0	0.9	4.0	2.2	1.2	4.3
About once a week	6.9	3.3	9.2	3.7	3.9	6.0	4.4	3.8	6.7
2-3 times a week	7.9	7.9	19.7	16.4	11.1	17.9	14.6	10.4	18.3
4-5 times a week	4.3	3.0	5.0	10.4	4.7	9.2	9.1	4.4	8.3
Everyday	12.5	21.8	10.3	24.6	26.2	33.3	21.9	25.3	28.1
Do not know	00	0.0	0.3	00	0.1	0.0	00	0.1	0.1
<b>Total</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

In 2013, only three radio stations mentioned as “listened to most” by more than 6% of the sample: Radio Nepal (National station), Shri Nagar FM (local station) and Radio Bheri FM (Local station). In 2015, the most three popular radio stations listen to by 7 % or more of the populations were Radio Nepal (National station), Radio Bheri and radio Rolpa (local stations).

The data also shows that some of the other local radio stations are also popular in both mountains and hills. However, the pattern of popularity of the radio stations is not consistent over the years and across regions.

**Table 3.2 Percentage distributions of currently married women aged 15-49 years by 10 popular radio station they listen to most and ecological regions**

Name of radio station	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Radio Nepal	16.3	7.6	21.1	9.1	6.9	5.8	10.5	7.0	8.7
Shri Nagar FM	0.0	3.1	0.0	10.6	6.9	6.8	8.6	6.2	5.5
Radio Bheri FM	0.0	0.0	0.0	7.4	9.2	9.7	6.0	7.6	7.8
Tamor FM (Panchthar)	55.0		21.1	11.2		2.0	19.6		5.6
Madan Pokhara FM	0.0		0.0	12.7		4.8	10.3		3.9
Kantipur FM	10.0		5.1	10.0		6.4	10.0		6.1
Sindhuli Gadhi FM	0.0		8.0	10.0		0.0	8.1		1.5
Sahara FM	0.0		0.0	8.0		1.5	6.4		1.2
Khandbari FM	0.0	16.8	0.0	7.1	0.0	4.6	5.7	3.0	3.7
Radio Rolpa	0.0		0.0	7.1		8.7	5.7		7.0
Parbat FM		0.0			3.6			3.0	
Syanja FM		0.0			4.3			3.5	
AE Deurali FM		0.0			4.1			3.4	
Tehrathum FM		0.0	0.0		3.0	0.3		2.4	0.2
Dhurbatara FM		0.0			3.0			2.4	
Nuwakot FM		0.0	0.0		2.8	3.1		2.3	2.5
Jatapa FM (Nuwakot)	0			4.6			3.7		
Do not know		8			2.1			3.2	
Naya Karnali FM (Kalikot)	14.8			0			2.8		
Sindhuligadhi FM (Sindhuli)	0			3.2			2.6		
Triveni FM (Doti)		0			2.8			2.3	
Shaileshwari FM (Doti)	0			2.7			2.2	741	
Rampur FM (Palpa)		0			2.6			2.1	
Chomlungma FM (Bhojpur)	0			2			1.6		
Jaljala FM (Rolpa)		0			1.9			1.5	
Siddhababa FM (Sindhuli)	0			1.7			1.4		
Didi Bahini FM (Parbat)	0			1.6			1.3		
Prime FM (Sindhupalchowk)	5.9			0			1.1		
Taplejung FM (Taplejung)	4.6			0.3			1.1		
Others*			11.3			21			18.8
<b>Total</b>	<b>128</b>	<b>131</b>	<b>237</b>	<b>695</b>	<b>610</b>	<b>1002</b>	<b>823</b>	<b>741</b>	<b>1239</b>

\* Other radio station mentioned were: Dhading FM (Nuwakot), Shaligram FM (Parbat), Trishuli FM (Nuwakot), Chhagal FM (Panchthar), Dhaulagiri FM (Parbat), Gurans FM (Bhojpur), Kalika FM (Tanahun), Sagarmatha FM, Damauli FM (Tanahun), Bandipur FM (Tanahun), Bulbule FM (Surkhet), Rama Roshan FM (Bajura), Bajura FM (Bajura), Bagmati FM (Nuwakot), Gorkha FM (Tanahun), Image FM, Patala FM (Tanahun; Palpa), Rajmarga FM (Nuwakot), Sinha Lila FM (Taplejung), Sumalung FM (Panchthar), Laligurans FM (Panchthar; Bhojpur), Phaktalung FM (Taplejung), Saptakoshi FM (Panchthar; Bhojpur), Amargadhi FM (Doti), Baglung FM (Parbat), Chautari FM (Tanahun), Chuli Malika FM (Kalikot), Dhorbarahi FM (Tanahun), Jagaran FM (Surkhet), Kapurkot FM (Rolpa), Koshi FM (Bhojpur), Makalu FM (Panchthar), Melemchi FM (Sindhupalchowk), Namu Buddha FM (Sindhupalchowk), Paurakhi FM (Bajura), Sanu Bheri FM (Rolpa), Suryadaya FM (Tanahun), Terhathum FM (Panchthar), Ujalo FM, Unique FM (Palpa), Annapurna FM (Tanahun), Bir FM (Tanahun), Dhankuta FM (Panchthar), Gulmi FM (Tanahun), Hamro Radio FM (Sindhupalchowk), Himal FM (Surkhet), Kushum FM (Parbat), Muktinath FM (Palpa), Myagdi FM (Parbat), Palung FM (Nuwakot), Pathivara FM (Panchthar), Radio audio FM (Nuwakot), Radio City FM (Nuwakot), Radio Nepali Awaj FM (Kalikot), Ramechhap FM (Sindhuli), Sinargy FM (Tanahun), Surkhet FM (Surkhet).

In 2011, 93% of all radio listeners listened to the radio at their home which decreased to 82 % in 2015. The next place people said to listen to radio were either friend's relative house or work place.

**Table 3.3 Percentage distributions of currently married women aged 15-49 years by the place of listening to the radio and ecological regions**

Place of listening radio	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
At home	90.6	99.2	71.3	93.8	98.7	84.8	93.3	98.8	82.2
While at work	16.4	12.2	11.4	9.2	17.2	8.0	10.3	16.3	8.6
At friends/relatives house	21.1	1.5	32.1	17.3	1.6	22.3	17.9	1.6	24.1
Shop		0.0			0.3			0.3	
In listening group				0.4		0.0			0.1
Neighbor's place				0.8		0.3			0.4
DK		0.0			0.2			0.1	
<b>Total</b>	<b>128</b>	<b>131</b>	<b>237</b>	<b>695</b>	<b>610</b>	<b>1002</b>	<b>823</b>	<b>741</b>	<b>1239</b>

In 2011, Lok Lahari was the most popular radio program while news becomes most popular in 2013 and Lok Bhaka/ Lok Geet/ Lok Mala in 2015. In 2013, it was found that the proportion of people listening to the News was higher in the hills (31%) than mountains(16%) while in 2015, it was higher in mountains (34%) compared to hills (31%).

News, Lok Lahar, Lok Bhaka/ Lok Geet/ Lok Mala, Sathi sanga man ka kura (chatting with my best friends) and Folk Songs were the top five popular radio programs, although the order is not same for all years.

**Table 3.4 Percentage distribution of currently married women aged 15-49 years by program listened to most on the radio and ecological regions**

Title of program listened on radio	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
News		16.0	34.2	0.0	30.8	31.1		28.2	31.7
Lok Lahari	53.9	29.8	5.5	49.4	25.2	9.5	50.1	26	8.7
Lok Bhaka/ Lok Geet/ Lok Mala		5.3	19.0		12.5	38.8		11.2	35.0
Sathi sanga man ka kura (chatting with my best friends)	17.2	4.6	1.7	9.4	6.6	2.1	10.6	6.2	2.0
Folk Songs	4.7	5.3	16.5	9.9	3.4	4.9	9.1	3.8	7.1
Cine Songs; Modern Songs	1.6	1.5		2.2	1		2.1	1.1	
Suva Din	3.9	0.8		1.7	1.1	0.3	2.1	1.1	0.2
Filmy Guff	4.7	2.3		1.3	0.8	0.3	1.8	1.1	0.2
Swasthya nai dharma ho	1.6		0.4	1	1.1	1.4	1.1	0.9	1.2
Lok Susheli	-			1.3			1.1		
Lok Sansar	-			0.9			0.7		
Sangini Dial a Doctor	0.8			0.1	0.2	0.3	0.2	0.1	0.2
Phone in; Phone dial	0.8		3.0	-	0.5	0.5	0.1	0.4	1.0
Radio Filmy	0.8			-	0.2	0.1	0.1	0.1	0.1
Aafno pakha, aafnai bhaka					2.3				1.9
Deuda Songs		6.9			0.3				1.5
Bal Karyakram (children program)		3.1			1				1.3
Bhajan		1.5			1.1				1.2
Ojhelka Khabar		0			1.5				1.2
Tamang Songs (Seli)		3.8			0.5				1.1
Jindagi ka panaharu		3.1							0.5
Nigrani		2.3							0.4
Sorai program		2.3							0.4
Love Showcase						0.1			0.1
Child related program						0.5			0.4
Awareness program						0.3			0.2
Bhanchhin Aama			5.5			1.8			2.5
Other (Jeevan Ko Goreto; Mero Katha; Hate Malo; Pardeshi Ka Awaj; Khoj Khabar; Prem Nagari; Tamor Quiz; Mero Katha Mero	8.6	11.4	7.2	15.1	8.9	6.8	14.1	9.5	6.9
Do not know	1.6		0.8	7.8	1.0	0.2	6.8	0.8	0.3
<b>Total</b>	<b>128</b>	<b>131</b>	<b>237</b>	<b>695</b>	<b>610</b>	<b>1002</b>	<b>823</b>	<b>741</b>	<b>1239</b>

## 3.2 TELEVISION

The vast majority of respondents did not watch television at all which constituted 46 % in 2015, 76 % in 2013, and 74 % in 2011. The percentage of women not watching television at all was consistently higher in the mountains than in the hills.

Proportion of women watching TV every day is consistently increasing from 2011 to 2015. Although, this pattern is consistent in hills, it has declined in mountains from 6 % in 2011 to 2 % in 2015.

**Table 3.5 Percentage distributions of currently married women aged 15-49 years by frequency of watching television and ecological regions**

Frequency of watching television	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Not at all	86.6	89.1	61.1	70.3	72.9	41.3	73.9	76.2	45.7
Less than once in 2 weeks	2.6	0.0	13.6	2.5	0.1	17.4	2.5	0.1	16.5
About once every 2 weeks	0.7	0.0	2.8	0.9	0.2	2.6	0.9	0.2	2.7
About once a week	1.3	0.0	3.1	1.7	1.0	1.7	1.6	0.8	2.0
2-3 times a week	2.3	2.1	14.4	8.7	4.0	6.7	7.3	3.6	8.4
4-5 times a week	0.7	1.2	3.3	3.9	3.1	2.9	3.2	2.7	3.0
Everyday	5.9	7.6	1.7	12.0	18.7	27.5	10.6	16.4	21.7
<b>Total</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

Table 3.6 shows relatively lower proportion of the women saying to watch TV at home in 2015 compared to 2011 and 2013. This pattern is more consistent with the hills than in mountains. Another place mentioned for watching TV by a significant number of people was at a neighbor/relative/friends/parents' house and the patterns follows in both mountain and hills.

**Table 3.6 Percentage distributions of currently married women aged 15-49 years by place of watching television and ecological regions**

Place watching television [MR]	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
At home	70.7	88.9	70.7	75.1	95.1	60.3	74.6	94.6	61.9
Neighbor/relative/friend/parents	34.1	13.9	30.7	36.0	6.9	43.8	35.8	7.5	41.7
Cafe/bar	2.4	0.0			0.6		0.3	0.5	
<b>Total</b>	<b>41</b>	<b>36</b>	<b>140</b>	<b>325</b>	<b>350</b>	<b>740</b>	<b>366</b>	<b>386</b>	<b>880</b>

The most frequently watched channel in all three surveys was Nepal TV, despite that proportion watching Nepal TV in 2015 has declined to 80 % from 93 % in 2011. This pattern of decline is consistent in both the mountains and hills, indicating the decline in the popularity of Nepal TV and increase in the popularity of Kantipur TV.

**Table 3.7 Percentage distribution of currently married women aged 15-49 years by most frequently watched television channel and ecological regions**

Most frequently watched television channel	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Nepal TV	95.1	91.7	67.9	92.3	87.1	82.6	92.6	87.6	80.2
Nepal TV 2	4.9	0.0	0.7	0.6	1.1	1.4	1.1	1.0	1.3
Kantipur TV		8.3	12.9	5.5	5.7	11.2	4.9	6.0	11.5
Image Channel		0.0	0.7	0.3	1.4	0.7	0.3	1.3	0.7
ABC TV		0.0	1.4		0.6	0.4		0.5	0.6
Avenues TV		0.0	0.7	0.3	3.1	0.9	0.3	2.8	0.9
Nepal 1		0.0	0.7		0.6	0.4		0.5	0.5
Terai TV		0.0			0.3			0.3	
Byas Channel			0.0	0.6		0.4	0.5		0.3
Sagarmatha TV			1.4			0.0			0.2
Other channels			1.4			1.2			1.3
Do not know			12.1	0.3		0.8	0.3		2.6
<b>Total</b>	<b>41</b>	<b>36</b>	<b>140</b>	<b>325</b>	<b>350</b>	<b>740</b>	<b>366</b>	<b>386</b>	<b>880</b>

Note: Other channel= TV filmy; Arniko Channel; Surkhet 1; Trishuli TV; Betrawati Channel; Sungava

Among the different TV programs, *Meri Bassai* was the most popular program in all three surveys. However, when disaggregated by regions, *Meri Bassai* although remains to be the most popular program in the hills, news appears to be most popular TV program in Mountain followed by *Meri Bassai*. After *Meri Bassai*, the second most popular program was *Tito Satya*.

**Table 3.8 Percentage distributions of currently married women aged 15-49 years by ONE program watched most on television**

Programs watched the most on TV	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<i>Meri Bassai</i>	61.0	41.7	22.1	49.2	48.9	35.3	50.5	48.2	33.2
News		5.6	40.7		16.6	26.6		15.5	28.9
<i>Tito Satya</i>	26.8	22.2	5.0	27.1	18.6	13.8	27.0	18.9	12.4
<i>Jire Khursani</i>	9.8	13.9	1.4	13.5	4.3	9.2	13.1	5.2	8.0
<i>Chalchitra</i>	2.4		22.9			2.8	0.3		6.0
<i>Bhadragoal</i>			2.9			3.9			3.8
Other		0.0	2.9	3.1	6.8	3.8	2.7	6.4	3.6
<i>Harke Hawaldar</i>		5.6	0.0	1.8	2.0	2.2	1.6	2.3	1.8
<i>Khabar bhitra ko khabar</i>		0.0			0.9			0.8	
<i>Kantipur Aaja</i>		0.0	0.0	0.6	0.3	0.4	0.5	0.3	0.3
<i>Chham Chhami</i>			0.0	0.9		0.3	0.8		0.2
<i>Rajatpat</i>			0.0	0.3		0.1	0.3		0.1
<i>Woodkandu</i>			0.0	0.3		0.1	0.3		0.1
<i>Clapboards</i>			0.7			0.0			0.1
<i>Swastarasawal</i>			0.0			0.1			0.1
<i>Jhyaikuti</i>		5.6		0.6	1.1		0.5	1.6	
<i>Karuna</i>		0.0		0.3	0.6		0.3	0.5	
<i>Lok Geet</i>		2.8			1.1			1.3	
Love Story		2.8			0.0			0.3	
<i>Pilley in on</i>				0.3			0.3		
Do not know			1.4	1.8		0.4	1.7		0.6
<b>Total</b>	<b>41</b>	<b>36</b>	<b>140</b>	<b>325</b>	<b>350</b>	<b>740</b>	<b>366</b>	<b>386</b>	<b>880</b>

Others= Jeevan Chakra; Jhyaikuti; Deurali; Lok Dahari; Jhaaikutti; Prativako Aagan; Deurali; Lek lahari

### 3.3 OVERALL EXPOSURE TO TV AND/OR RADIO

In 2011, 36% of all the respondents watched neither TV nor radio and only 22% watched both radio and TV. About four-tenths (42%) received either radio or TV. In 2015, proportion who did not watch radio or TV declined to 18 % and those who watched both radio and TV increased to 49 %. There is also remarkable increase in the proportion of women watching both Radio and TV in both mountains and hills between 2011 and 2015. This indicates that, over the time, access/exposure to media among people living in hard to reach districts is increasing.

**Table 3.9 Percentage distributions of currently married women aged 15-49 years by exposure to one or more of media: radio, television**

Exposure to media	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
None	53.4	56.1	25.0	31.4	41.2	15.9	36.2	44.2	17.9
Only one	37.4	37.3	45.3	42.5	43.3	30.0	41.4	42.0	33.4
Both	9.2	6.7	29.7	26.1	15.6	54.1	22.4	13.8	48.7
<b>Total</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

## CHAPTER 4: CONTRACEPTION

### 4.1 MARRIAGE AND FERTILITY AND OPINIONS ON NUMBER AND SPACING OF CHILDREN

Age at first marriage is the age at which the respondent began living with her first spouse/partner. Marriage occurs relatively early in Nepal. In 2011, 29% of total respondents were married at the 16-17 years, which increased to 30% in 2015. Proportion marrying at 20 years of age or latter has increased from 22 % in 2011 to 24 % in 2015. At the same time the proportion marrying early (at less than 16 years) in 2011 and 2015 has remained almost constant (21 %).

In 2011 and 2015, the median age at first marriage remained constant at 17 years.

**Table 4.1 Percent distribution of currently married women aged 15-49 years by age at first marriage and ecological regions**

Age at marriage	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
< 16 years	28.2	24.2	28.9	19.5	17.3	18.3	21.4	18.7	20.6
16-17 Years	22.3	26.4	28.1	31.4	29.1	30.6	29.4	28.6	30.1
18-19 Years	24.9	26.4	20.3	27.8	27.8	26.7	27.1	27.5	25.2
20 years and over	24.6	23.0	22.8	21.3	25.7	24.4	22.0	25.2	24.1
Median	17	17	17	17	18	18	17	18	17
SD	3.1	3.0	3.3	2.7	2.7	2.8	2.8	2.8	3.0
Range	12-28	9-26	10-38	10-28	11-38	9-35	10-28	9-38	9-38
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

Almost all (over 94%) of the respondents have been pregnant at some point and virtually all (over 98%) of those who were pregnant gave birth.

**Table 4.2 Percent distribution of currently married women aged 15-49 years by their ever pregnancy, and child birth experience status and ecological regions**

Response	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Yes	93.4	93.9	96.1	94.2	95.2	95.7	94.1	94.9	95.8
No	6.6	6.1	3.9	5.8	4.8	4.3	5.9	5.1	4.2
<b>Total</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>
<b>Ever given birth</b>									
Yes	97.2	97.7	99.7	98.4	98.7	99.8	98.2	98.5	99.8
No	2.8	2.3	0.3	1.6	1.3	0.2	1.8	1.5	0.2
<b>Total</b>	<b>285</b>	<b>310</b>	<b>345</b>	<b>1032</b>	<b>1228</b>	<b>1204</b>	<b>1317</b>	<b>1538</b>	<b>1549</b>

The average number of children born to 2011 respondents was 2.7 (3.00 in the mountains), with a mean of 2.5 living and 0.2 not alive. The mean number of sons born was higher than that of daughters: 1.28 vs. 1.25 (1.41 vs. 1.30 in mountains).

The average number of children born in 2015 compared to 2011 shows a slight decline (from 2.73 to 2.70) indicating a slight decline in fertility. Since, the mean CEB in mountains between

2011 and 2015 remains constant, and this figure for hills shows a decline, the decline in overall fertility in the hard to reach district can be attributed to the decline observed in the hills.

**Table 4.3 Mean number of children ever born and currently living children among currently married women by ecological regions**

Age at marriage	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Mean number of children ever born [SD]	3.00 [2.10]	2.92 [2.14]	3.00 [2.0]	2.66 [1.77]	2.80 [1.84]	2.60 [1.70]	2.73 [1.85]	2.83 [1.90]	2.70 [1.80]
Mean number of living children [SD]	2.71 [1.83]	2.62 [1.73]	2.7 [1.6]	2.48 [1.60]	2.61 [1.60]	2.40 [1.5]	2.53 [1.65]	2.61 [1.63]	2.50 [1.50]
Mean number of children not alive now [SD]	0.31 [0.75]	0.30 [0.89]	0.36 [0.77]	0.19 [0.57]	0.20 [0.61]	0.18 [0.52]	0.22 [0.62]	0.22 [0.68]	0.22 [0.59]
Mean number of son ever born [SD]	1.41 [1.16]	1.60 [1.39]	1.60 [1.3]	1.24 [1.05]	1.44 [1.12]	1.30 [1.1]	1.28 [1.07]	1.47 [1.18]	1.40 [1.10]
Mean number of daughter ever born [SD]	1.30 [1.20]	1.32 [1.33]	1.50 [1.30]	1.24 [1.17]	1.37 [1.39]	1.3 [1.30]	1.25 [1.17]	1.36 [1.37]	1.30 [1.30]
Mean number of son not alive now [SD]	0.15 [0.42]	0.19 [0.64]	0.20 [0.40]	0.10 [0.36]	0.11 [0.40]	0.10 [0.40]	0.11 [0.37]	0.12 [0.46]	0.10 [0.40]
Mean number of daughter not alive now [SD]	0.13 [0.44]	0.119 [0.39]	0.20 [0.50]	0.08 [0.33]	0.09 [0.36]	0.10 [0.30]	0.09 [0.36]	0.09 [0.37]	0.10 [0.40]
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

Almost half the respondents were last pregnant in more than five years ago, with a median of five to six years. 3.6 % were pregnant at the time of survey in 2011 against 4.1% in 2015. About five percent of the respondents have never been pregnant in all three surveys.

**Table 4.4 Last pregnancy among currently married women by ecological regions**

When pregnant last time	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Less than one year	4.3	0.9	5.0	2.5	0.2	2.6	2.9	0.4	3.1
1 - <2 Years	15.7	11.8	20.0	14.9	7.8	13.3	15.1	8.6	14.8
2 - <3 Years	13.8	18.2	15.3	12.9	12.2	11.3	13.1	13.5	12.2
3 - <4 Years	5.9	11.5	9.4	12.6	8.2	9.0	11.1	8.9	9.1
4 - <5 Years	3.6	9.1	5.3	10.5	7.7	6.3	9.0	8.0	6.0
More than 5 years	44.6	38.2	35.3	37.9	52.0	49.1	39.4	49.2	46.0
Currently pregnant	5.6	0.6	5.6	3.0	1.6	3.7	3.6	1.4	4.1
Never pregnant	6.6	6.1	3.9	5.8	4.8	4.3	5.9	5.1	4.2
Never had live birth	0.0	2.1	0.3	0.0	1.2	0.2	0.0	1.4	0.2
DK/NR/unsure	0.0	1.5	0.0	0.0	4.1	0.2	0.0	2.6	0.2
Mean	4.4	4.5	5.2	4.4	4.9	7.0	4.4	4.8	6.6
Median	6	5	3	5	6	5	5	6	5
Std. Deviation	1.80	1.56	5.2	1.63	1.41	5.8	1.67	1.48	5.7
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

Last time they were pregnant, 70 % in 2011 wanted the pregnancy then, which declined to 69% in 2015. Those who said they did not want to be pregnant at that time increased from 12 % in 2011 to 20 % in 2015. There is also slight increase in those who said they wanted the pregnancy later increased from 9 % in 2011 to 12 % in 2015. This roughly<sup>2</sup> indicates the unmet need of 30% in hard to reach districts.

<sup>2</sup> Only this variable do not estimates the true unmet, as there are other several variables have to be consider. However, this hints that there is some unmet need among the women in hard to risk district.

**Table 4.5 Percentage distributions of currently married women aged 15-49 years by whether she wanted to be pregnant then, later or not at all**

Want to get pregnant	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Did not want	9.1	38.0	24.0	12.5	27.7	18.6	11.8	29.8	19.8
Wanted later	8.8	18.2	15.0	9.2	15.8	10.6	9.1	16.2	11.6
Wanted then	82.1	42.2	60.7	74.3	55.9	70.7	76.0	53.2	68.5
Do not know	0.0	1.7	0.3	4.0	0.6	0.1	3.1	0.8	0.1
<b>Total (n)</b>	<b>285</b>	<b>303</b>	<b>346</b>	<b>1032</b>	<b>1212</b>	<b>1203</b>	<b>1317</b>	<b>1515</b>	<b>1549</b>

The respondents' opinion regarding ideal number of children is presented in table 4.6. In this regards, 73% in 2011 and 78% in 2015 opined that the ideal number of children a couple should have is 2. About 19 % in 2011 and 15 % in 2015 opined that the ideal number of children a couple should have is 3. Percent of respondents who perceived that a woman should have one or five children are very small (less than 3%). The perceived median number of children a woman should have is calculated to 2, irrespective of whether it was in mountain or hills.

**Table 4.6 Percentage distributions of currently married women aged 15-49 years by perception on ideal number of children a woman should have by ecological regions**

Perception on ideal number of children a couple should have	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
1	1.0	1.8	1.9	2.1	3.0	2.8	1.9	2.8	2.6
2	62.6	71.8	72.8	75.6	74.7	79.3	72.8	74.1	77.8
3	23.6	17.0	19.4	18.3	17.0	13.9	19.4	17.0	15.1
4	10.8	7.9	5.6	3.2	4.3	4.0	4.9	5.0	4.3
5 +	1.9	1.2	0.3	0.8	0.5	0.1	1.1	0.7	0.1
DK		0.3			0.5			0.4	
Mean	2.50	2.35	2.29	2.25	2.24	2.19	2.31	2.26	2.22
Median	2	2	2	2	2	2	2	2	2
Std. Deviation	0.79	0.70	0.61	0.59	0.61	0.54	0.65	0.63	0.56
<b>Total</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

Majority of the respondents (39 % in 2011, 48 % in 2013 and 2015) opined that '5 years' of spacing was the ideal number of years between births. The perceived mean ideal interval between births from 2011 to 2015 was 4 years.

Majority of the respondents in all three surveys opined injectable as the best FP method to space births. This was followed by implants, OCP and IUD.

**Table 4.7 Percentage distribution of currently married women aged 15-49 years by opinion on the ideal number of years to wait between births and best way to space births and ecological regions,**

Opinion on ideal number of years to wait between births	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
1	-	0.9		0.3	0.2		0.2	0.3	
2	13.4	5.2	6.4	10.2	4.6	3.9	10.9	4.7	4.4
3	22.6	19.7	25.6	21.2	20.1	17.4	21.5	20.0	19.2
4	28.5	26.7	23.9	23.0	20.2	23.5	24.2	21.5	23.6
5	31.5	42.7	37.8	41.2	49.1	50.8	39.1	47.8	47.9
6	3.9	3.0	5.6	3.4	3.3	3.1	3.5	3.2	3.6
7 +	-	1.2	0.8	0.7	1.3	1.3	0.6	1.3	1.2
DK		0.6			1.2			1.1	
Mean	3.90	4.22	4.13	4.08	4.31	4.36	4.04	4.29	4.31
Median	4	4	4	4	5	5	4	5	5
Std. Deviation	1.11	1.127	1.091	1.12	1.076	0.987	1.12	1.087	1.015
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>
<b>Opinion on the best way to space births</b>									
Female Sterilization	2.0	0.3	0.0	4.6	2.2	0.1	4.0	1.9	0.1
Male Sterilization	3.9	2.4	0.6	8.2	3.6	1.0	7.3	3.3	0.9
IUD	5.9	10.0	4.7	8.2	8.4	12.4	7.7	8.8	10.7
Injectables	54.8	55.5	49.7	38.4	40.8	42.9	41.9	43.8	44.4
Implants	7.2	7.3	11.4	10.6	10.6	15.3	9.9	9.9	14.4
Pills	14.1	8.8	13.9	8.3	10.0	9.8	9.6	9.8	10.7
Male Condoms	3.9	5.8	6.9	6.8	7.9	7.3	6.1	7.5	7.2
Rhythm/periodic abstinence	0.7	0.6	0.8	1.1	0.9	0.2	1.0	0.8	0.3
Withdrawal	3.6	1.8	5.8	3.7	3.0	7.4	3.7	2.8	7.0
Avoid sex	1.0	0.0	0.6	3.6	0.7	0.2	3.0	0.6	0.3
DK	2.9	7.6	5.6	6.6	11.9	3.3	5.7	11.0	3.8
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

## 4.2 KNOWLEDGE AND USE OF CONTRACEPTION

### 4.2.1 KNOWLEDGE OF CONTRACEPTION

In surveys virtually all (99% and more) respondents said they knew at least one modern contraceptive method. Percentage who said to know at least three modern methods of contraceptive increased to 99 % in 2015 from 94% in 2011.

Knowledge on every modern method of family planning in 2015 has increased compared to 2011 in both mountains and hills. The analysis also reveals that, in 2015, knowledge of all family planning methods in hills is higher than that in mountains.

**Table 4.8 Percent distribution of currently married women aged 15-49 years by knowledge of different contraceptive methods and ecological regions**

Knowledge of different contraceptive methods	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Female sterilization	83.3	93.9	95.3	93.4	92.6	98.4	91.2	92.9	97.7
Male Sterilization	83.9	93.0	94.4	94.3	90.1	98.5	92.1	90.7	97.6
IUD	60.0	84.8	77.8	82.3	85.3	90.6	77.4	85.2	87.7
Injectables	91.5	99.4	99.7	97.7	97.7	99.9	96.4	98.0	99.9
Implants	63.9	79.1	83.9	82.0	75.2	92.4	78.1	76.0	90.5
Pills	77.7	91.5	95.8	90.0	93.3	98.0	87.3	92.9	97.5
Condoms	77.0	94.5	96.4	91.4	91.6	99.0	88.3	92.2	98.5
Female condoms	13.1	17.9	18.6	31.6	28.2	38.3	27.6	26.1	33.9
Rhythm method	22.3	23.9	36.9	32.5	41.6	49.8	30.3	38.0	47.0
Withdrawal	26.6	21.5	44.4	39.8	45.3	72.1	36.9	40.4	66.0
Knows at least one method (%)	98.4	100.0	100.0	99.2	98.7	100.0	99.0	99.0	100.0
Knows at least three modern methods (%)	86.6	98.79	98.9	96.3	96.90	99.5	94.2	97.28	99.4
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

## 4.2.2 USE OF CONTRACEPTION

### 4.2.2.1 EVER USE AND CURRENT USE OF CONTRACEPTIVE METHODS

In 2011, 68% of respondents said they had used a method of family planning at some time, which in 2015 increased to 79 %. In all three surveys, injectables was the most widely ever used modern method followed by pills and condoms, irrespective of whether it was in the mountain or hill regions.

**Table 4.9 Percent distribution of currently married women aged 15-49 years by ever use of contraceptive methods by ecological regions**

Ever use different contraceptive methods	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Female sterilization	3.9	2.7	2.8	7.4	5.5	4.8	6.6	4.9	4.4
Male Sterilization	11.1	8.5	8.6	8.8	9.6	10.4	9.3	9.4	10.0
IUD	5.2	4.2	2.8	2.3	4.0	2.9	2.9	4.0	2.8
Injectables	37.0	40.9	48.1	34.5	44.9	40.4	35.1	44.1	42.1
Implants	2.6	1.8	4.7	2.5	4.6	4.7	2.5	4.0	4.7
Pills	13.4	16.1	24.7	12.8	25.2	26.1	12.9	23.3	25.8
Condoms	3.0	15.8	9.2	9.9	18.3	18.7	8.4	17.8	16.6
Female condoms		0.3			0.2			0.2	
Rhythm method	3.6	4.2	5.8	2.4	7.2	5.5	2.6	6.6	5.6
Withdrawal	10.2	6.7	12.8	12.6	13.8	30.9	12.1	12.3	26.9
Ever used any method %	66.6	65.2	71.1	68.3	74.2	81.4	67.9	72.4	79.1
Ever used modern method %	59.0	62.7	65.8	62.0	70.5	70.8	61.4	68.9	69.7
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

The proportion reporting to ever use a traditional method (rhythm and withdrawal) has also increased over the time. The analysis reveals that proportion of women saying to ever used female sterilization has slightly decreased and those saying to have ever used male sterilization have slightly increased. This pattern is consistent in both mountain and hills. The IUD ever users in mountain has sharply declined from 5 % in 2011 to 3 % in 2015.

The contraceptive prevalence rate is calculated by dividing the total number of current contraceptive users by total number of currently married women multiplied by 100. The analysis shows that modern contraceptive use rate has declined from 45 % in 2011 to 39 % in 2015. Similarly, any method use has declined from 50 % in 2011 to 48 % in 2015. The similar pattern of decline in CPR is also observed for mountains and hills. Major part of the decline can be attributed to spousal separation largely due to labor migration (*Khanal M. N., Shrestha D.R., Panta P.D., and Mehata S. 2013*).

Among the current contraceptive methods, injectable remain to be popular method throughout 2011 to 2015 in both the mountains and hills, followed by male sterilization and pills.

**Table 4.10 Percent distribution of currently married women aged 15-49 years by current use of contraceptive methods by ecological regions**

Current use of different contraceptive methods	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Female Sterilization	3.9	2.7	2.8	7.4	5.3	4.8	6.6	4.8	4.4
Male Sterilization	11.1	8.2	8.6	8.8	9.6	10.4	9.3	9.3	10.0
IUD	2.6	2.7	0.6	2.0	1.5	1.7	2.1	1.7	1.5
Injectables	18.0	22.1	15.6	16.4	15.8	11.6	16.8	17.1	12.5
Implants	1.3	1.5	3.1	2.1	2.9	2.7	1.9	2.6	2.8
Pills	6.2	3.6	4.7	5.2	5.4	5.5	5.4	5.1	5.3
Male Condoms	0.7	3.0	1.7	3.7	4.0	3.4	3.1	3.8	3.0
Rhythm/periodic abstinence	0.3	1.2	0.6	0.5	0.7	0.2	0.5	0.8	0.3
Withdrawal	4.3	0.9	4.7	5.4	2.3	8.7	5.1	2.0	7.8
Avoid sex		0.0			0.1			0.1	
Any method	48.5	46.1	42.2	50.7	47.6	49.0	50.2	47.3	47.5
Modern method	43.9	43.9	36.9	45.5	44.5	40.2	45.1	44.4	39.4
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

#### 4.2.2.2 CURRENT USER'S PROFILE

Modern method users were more likely to be either in 35-44 or in the 25-34 age groups than in the younger or older groups. However, injectable users were more likely to be in the 25-34 age groups than in other age groups. Majority of the modern method users were more likely to have no schooling or primary education. While Hindus were more likely to use modern methods, non-Hindus were more likely to be injectable users than Hindus were. Injectable users were more likely to be Newars and least likely to be Dalits. Percentage of non-migrants who were using injectables was somewhat higher than that of migrants. Non-migrants were more likely to use modern methods than migrants were in 2013 and 2015.

**Table 4.11 Percent distribution of currently married women contraceptive use, age and selected background characteristics**

Background information	modern method users			Injectable users			Temporary Method users			Modern methods non users			Total (n)			Total %
	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	
<b>Place of residence</b>																
Mountains	43.9	43.9	36.9	18.0	22.1	15.6	10.8	10.9	10.0	56.1	56.1	63.1	305	330	360	100.0
Hills	45.5	44.5	40.2	16.4	15.8	11.6	13.1	13.7	13.3	54.5	55.5	59.8	1095	1290	1260	100.0
<b>Age of respondents</b>																
15-24	32.2	26.0	25.3	16.6	15.7	12.1	15.1	8.2	12.1	67.8	74.0	74.7	385	389	423	100.0
25-34	46.5	49.2	38.7	17.8	18.8	14.5	12.7	17.9	14.9	53.5	50.8	61.3	568	661	636	100.0
35-44	58.9	54.6	51.2	17.9	18.3	10.6	12.6	12.2	11.8	41.1	45.4	48.8	341	449	424	100.0
44 - 49	40.6	39.7	50.4	8.5	8.3	10.2	2.8	6.6	5.8	59.4	60.3	49.6	106	121	137	100.0
<b>Education of respondents</b>				Ns			*									
No schooling	46.5	46.8	42.5	17.5	17.6	12.0	9.1	10.5	9.0	53.5	53.2	57.5	749	763	692	100.0
Some primary	45.2	46.7	44.7	17.6	19.0	17.7	12.8	14.3	13.7	54.8	53.3	55.3	250	315	322	100.0
Some secondary	41.5	39.1	33.6	12.8	17.2	13.0	17.9	12.2	13.6	58.5	60.9	66.4	234	238	345	100.0
SLC and over	44.3	40.1	32.6	18.0	13.8	6.5	20.4	19.4	19.5	55.7	59.9	67.4	167	304	261	100.0
<b>Religion</b>				Ns			Ns									
Hindus	46.3	44.7	40.1	16.4	16.0	11.7	12.8	13.1	11.7	53.7	55.3	59.9	1086	1431	1303	100.0
Non-Hindus	41.1	42.3	36.6	18.2	25.4	15.5	11.8	13.2	16.4	58.9	57.7	63.4	314	189	317	100.0
<b>Caste/ethnicity</b>																
Brahmans Chhetris	47.4	44.0	40.8	12.5	14.2	10.0	14.9	13.1	9.8	52.6	56.0	59.2	489	654	601	100.0
Madhesi caste		37.5			10.2			13.6			62.5			88		100.0
Dalits	47.7	44.2	36.1	21.8	15.4	13.9	10.2	10.2	9.1	52.3	55.8	63.9	216	285	252	100.0
Newars	67.1	68.3	54.0	37.8	30.5	20.7	12.2	28.0	12.6	32.9	31.7	46.0	82	82	87	100.0
Janajatis	39.5	41.9	37.6	15.7	21.0	13.1	11.6	11.8	16.3	60.5	58.1	62.4	613	499	680	100.0
<b>Migration status</b>																
Migrant	44.5	46.5	43.0	16.1	15.9	10.2	12.3	18.6	15.3	55.5	53.5	57.0	1183	258	235	100.0
Non Migrant	48.8	44.0	38.8	20.3	17.3	12.9	14.3	12.1	12.1	51.2	56.0	61.2	217	1362	1385	100.0
<b>Exposure to radio and/or TV</b>																
None	45.0	42.9	28.3	17.6	17.5	9.3	9.5	10.9	7.9	55.0	57.1	71.7	507	716	290	100.0
Only one	41.6	45.7	40.3	15.9	18.4	13.9	11.9	15.0	10.9	58.4	54.3	59.7	579	681	541	100.0
Both	51.9	45.3	43.0	17.2	12.1	12.7	18.2	14.8	15.5	48.1	54.7	57.0	314	223	789	100.0
<b>Wealth quintile</b>																
Poorest	36.5	41.7	29.0	12.4	21.9	9.7	11.4	11.7	9.7	63.5	58.3	71.0	315	324	321	100.0
Second	44.3	46.4	36.2	20.6	21.7	12.6	9.1	13.9	9.8	55.7	53.6	63.8	287	323	326	100.0
Third	47.2	41.9	41.8	18.8	16.9	15.7	11.1	10.6	13.8	52.8	58.1	58.2	271	320	325	100.0
Fourth	47.1	42.9	42.3	17.1	14.9	12.7	15.6	12.8	15.4	52.9	57.1	57.7	263	329	324	100.0
Richest	52.3	49.1	47.8	15.5	10.2	11.7	16.3	16.7	14.2	47.7	50.9	52.2	264	324	324	100.0
<b>Total</b>	<b>45.1</b>	<b>44.4</b>	<b>39.4</b>	<b>16.8</b>	<b>17.1</b>	<b>12.5</b>	<b>12.6</b>	<b>13.1</b>	<b>12.6</b>	<b>54.9</b>	<b>55.6</b>	<b>60.6</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>	<b>100.0</b>

In all surveys, modern method users were most likely to be in the richest SES quintile. However, respondents in the poorest quintile were less likely to be injectable users in 2011 and 2015 as compared to the richest.

Almost all current users said their husband was in favor of using their current method. This ranged from 97% for Pills to 100% for Female sterilization, IUD and Condoms.

**Table 4.12 Percent distribution of currently married women aged 15-49 years by whether husband was in favor or opposed to their current contraceptive method and selected background characteristics**

FP method currently using	Survey year	Mountain				Hill				Both			
		In favor	Opposed	Neutral	Total (n)	In favor	Opposed	Neutral	Total (n)	In favor	Opposed	Neutral	Total (n)
Female Sterilization	2011	100.0	0.0	0.0	12	97.5	1.2	1.2	81	97.8	1.1	1.1	93
	2013	100.0	0.0	0.0	9	97.1	2.9	0.0	69	97.4	2.6	0.0	78
	2015	100.0	0.0	0.0	10	100.0	0.0	0.0	61	100.0	0.0	0.0	71
Male Sterilization	2011	100.0	0.0	0.0	34	99.0	1.0	0.0	96	99.2	0.8	0.0	130
	2013	100.0	0.0	0.0	27	99.2	0.8	0.0	124	99.3	0.7	0.0	151
	2015	100.0	0.0	0.0	31	99.2	0.8	0.0	131	99.4	0.6	0.0	162
IUD	2011	100.0	0.0	0.0	8	95.5	4.5	0.0	22	96.7	3.3	0.0	30
	2013	88.9	11.1	0.0	9	100.0	0.0	0.0	19	96.4	3.6	0.0	28
	2015	100.0	0.0	0.0	2	100.0	0.0	0.0	22	100.0	0.0	0.0	24
Injectables	2011	100.0	0.0	0.0	55	92.2	2.2	5.6	180	94.0	1.7	4.3	235
	2013	95.9	4.1	0.0	73	98.0	1.0	1.0	202	97.5	1.8	0.7	275
	2015	98.2	0.0	1.8	56	97.9	0.7	1.4	146	98.0	0.5	1.5	202
Implants	2011	100.0	0.0	0.0	4	95.7	0.0	4.3	23	96.3	0.0	3.7	27
	2013	100.0	0.0	0.0	5	91.9	5.4	2.7	37	92.9	4.8	2.4	42
	2015	100.0	0.0	0.0	11	97.1	0.0	2.9	34	97.8	0.0	2.2	45
Pills	2011	100.0	0.0	0.0	19	96.5	1.8	1.8	57	97.4	1.3	1.3	76
	2013	83.3	16.7	0.0	12	98.5	1.5	0.0	67	96.2	3.8	0.0	79
	2015	94.1	5.9	0.0	17	97.1	0.0	2.9	69	96.5	1.2	2.3	86
Male Condoms	2011	100.0	0.0	0.0	2	100.0	0.0	0.0	39	100.0	0.0	0.0	41
	2013	100.0	0.0	0.0	10	98.0	2.0	0.0	51	98.4	1.6	0.0	61
	2015	100.0	0.0	0.0	6	100.0	0.0	0.0	43	100.0	0.0	0.0	49
<b>Total</b>	<b>2011</b>	<b>100.0</b>	<b>0.0</b>	<b>0.0</b>	<b>148</b>	<b>96.2</b>	<b>1.4</b>	<b>2.3</b>	<b>555</b>	<b>97.0</b>	<b>1.1</b>	<b>1.8</b>	<b>703</b>
	<b>2013</b>	<b>96.1</b>	<b>3.9</b>	<b>0.0</b>	<b>152</b>	<b>98.0</b>	<b>1.5</b>	<b>0.5</b>	<b>609</b>	<b>97.6</b>	<b>2.0</b>	<b>0.4</b>	<b>761</b>
	<b>2015</b>	<b>98.7</b>	<b>0.7</b>	<b>0.7</b>	<b>152</b>	<b>98.7</b>	<b>0.3</b>	<b>1.0</b>	<b>618</b>	<b>98.7</b>	<b>0.4</b>	<b>0.9</b>	<b>770</b>

### 4.2.2.3 SOURCE OF SUPPLY OF CURRENT METHODS

All current users of modern contraceptive methods were asked the source where they first obtained the current method used. Table 4.13 documents the main sources of contraception.

In all three surveys, the government sector was the major source of where they first obtained their current contraceptive methods in Nepal (over 78 %). Within the government sector, over 35 % of current users first obtained their current methods from government hospitals or health posts in 2013 and 2015. The percentage of current modern method users obtaining the first method they used from the health post is decreasing from 17 % in 2011 to 5 % in 2015.

**Table 4.13 Percent distribution of currently married women aged 15-49 years who are currently using a modern method of contraceptives by sources from where they first obtained their contraceptives by ecological regions**

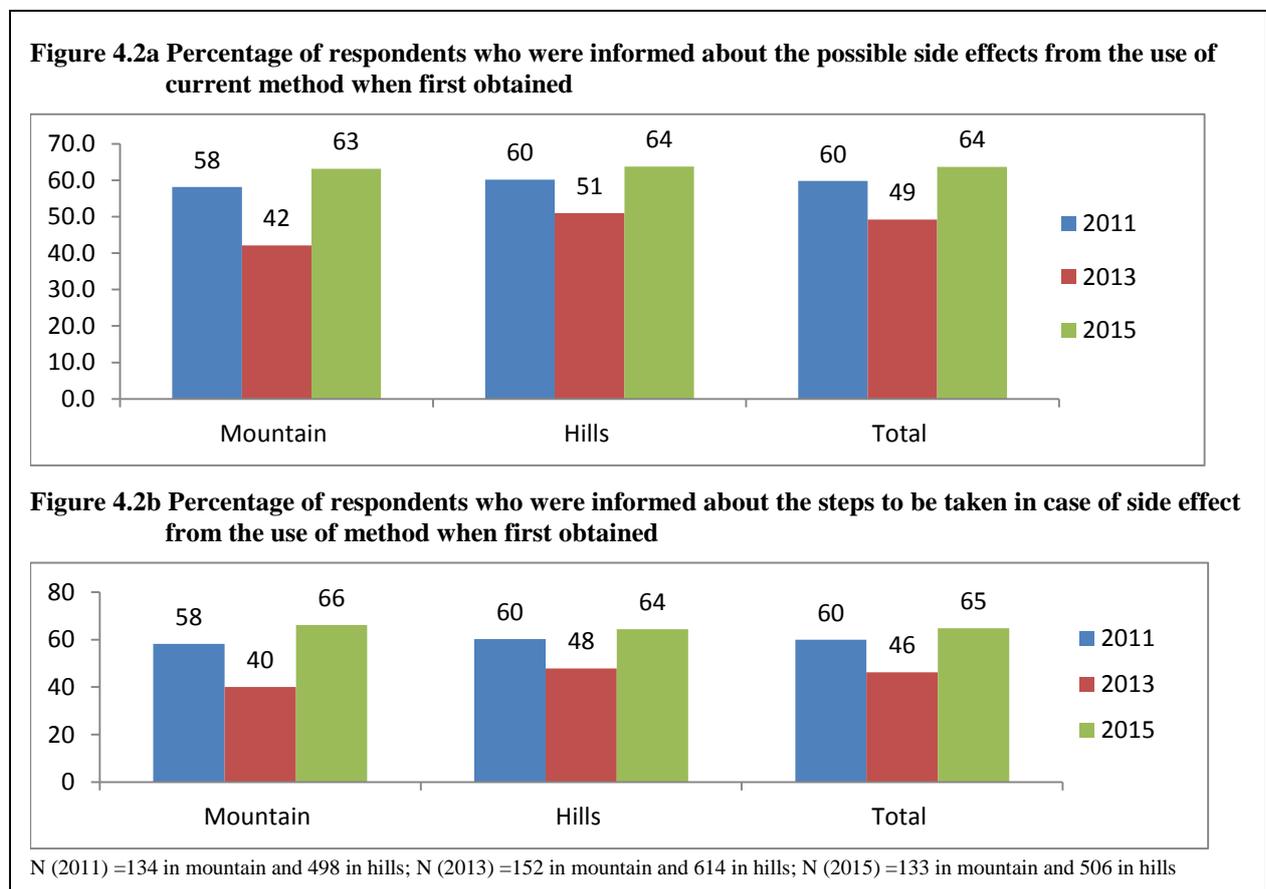
Different source of contraceptive methods services	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Government Sector</b>	80.6	78.3	91.0	76.9	78.6	82.0	77.7	78.5	83.9
Govt. Hospital/Clinic	2.2	24.3	18.0	1.2	26.7	37.5	1.4	26.2	33.5
PHC Center	23.9	0.7	3.0	27.1	0.8	1.2	26.4	0.8	1.6
Health Post	35.1	30.3	33.1	18.3	34.0	23.1	21.8	33.3	25.2
Sub-Health Post	13.4	13.8	1.5	18.3	7.5	6.1	17.2	8.7	5.2
Mobile Clinic	3.7	3.3	15.0	9.0	5.0	7.5	7.9	4.7	9.1
FCHV	0.7	5.9	0.8	2.0	4.6	2.8	1.7	4.8	2.3
PHC outreach	1.5		19.5	1.0		3.8	1.1		7.0
<b>Non-government (NGO) Sector</b>	5.2	2.7	0.0	5.6	1.9	2.2	5.5	2.0	1.7
FPAN	4.5	0.0	0.0	3.2	0.7	2.0	3.5	0.5	1.6
Marie Stopes	0.7	2.0	0.0	0.6	0.5	0.2	0.6	0.8	0.2
UMN	-	0.0		1.8	0.0		1.4	0.0	
ADRA		0.0			0.5			0.4	
Other NGO.		0.7			0.2			0.3	
<b>Private medical sector</b>	9.0	13.2	9.0	11.4	13.1	14.8	10.9	13.2	13.6
Private Hospital/Clinic	8.2	9.9	1.5	4.4	4.7	5.5	5.2	5.7	4.7
Pharmacy	0.7	3.3	7.5	6.8	8.1	7.5	5.5	7.2	7.5
Sangini outlet	-	0.0	0.0	0.2	0.0	1.8	0.2	0.0	1.4
Other Private		0.0			0.3			0.3	
<b>Other sources</b>	4.5	5.9	0.0	3.6	6.4	1.0	3.8	6.3	0.8
Camps; sterilization camp	4.5	0.0		1.2	0.0		1.9	0.0	
In India		0.0		2.2	0.0		1.7	0.0	
Shop		0.0		0.2	0.0		0.2	0.0	
Friend/Relative		4.6	0.0		4.1	0.2		4.2	0.2
Husband		0.0			1.8			1.4	
Do not know/do not remember		1.3	0.0		0.5	0.8		0.7	0.6
<b>Total (n)</b>	<b>134</b>	<b>152</b>	<b>133</b>	<b>498</b>	<b>614</b>	<b>506</b>	<b>632</b>	<b>766</b>	<b>639</b>

Between 11 to 14 % of the current modern method users in 2011, 2013 and 2015 obtained the first method they used from the private sector, either from pharmacy or from private hospital. Proportion of current users obtaining the first method they used from a NGO over the year has declined (from 6 % in 2011 to 2 % in 2015).

#### 4.2.2.4 INFORMATION RECEIVED ON SIDE EFFECTS AND INSTRUCTIONS FOR ITS REMEDY

The proportion of respondents informed about the possible side effects from the use of current methods the first time they obtained the method in 2015 have improved compared to 2011. A total of 64% of 2015 respondents as against 60 % in 2011 said they had been informed about the possible side effects from the use of current methods the first time they obtained the method. Similarly, 65 % in 2015 as against 60 % in 2011 had also been informed about what to do if they experienced side effects (60% in the Hill region and 58% in the Mountain). Similar improvement in 2015 compared to 2011 was also observed when the data was disaggregated by mountains and hills.

Figure 4.2a presents the percentage of respondents who had been informed about the possible side effects from the use of current methods when they first got it and figure 4.2b presents the percentage of respondents who were informed about the steps to be taken in case of side effects at that time.



Information received on possible side effects of current method among respondents in all surveys varied by method used, with those using condoms and male sterilization were relatively lower (most likely because their husband was the actual client) and implant the highest.

**Table 4.14 Percent distribution of currently married women aged 15-49 years who are currently using a modern method of contraceptives by whether they were told about possible side effects by method and ecological regions**

Method currently using	Survey year	Told about possible side effects											
		Mountain				Hills				Both			
		Yes	No	DK	Total (n)	Yes	No	DK	Total (n)	Yes	No	DKI	Total (n)
Female sterilization	2011	41.7	58.3	0.0	12	70.4	23.5	6.2	81	66.7	28.0	5.4	93
	2013	77.8	11.1	11.1	9	50.7	47.8	1.4	69	53.8	43.6	2.6	78
	2015	100.0	0.0	0.0	10	59.0	41.0	0.0	61	64.8	35.2	0.0	71
Male sterilization	2011	76.5	23.5	0.0	34	43.8	21.9	34.4	96	52.3	22.3	25.4	130
	2013	22.2	3.7	74.1	27	41.9	14.5	43.5	124	38.4	12.6	49.0	151
	2015	58.1	12.9	29.0	31	60.3	26.0	13.7	131	59.9	23.5	16.7	162
IUD	2011	75.0	25.0	0.0	8	68.2	31.8	0.0	22	70.0	30.0	0.0	30
	2013	55.6	44.4	0.0	9	68.4	31.6	0.0	19	64.3	35.7	0.0	28
	2015	100.0	0.0	0.0	2	90.9	9.1	0.0	22	91.7	8.3	0.0	24
Injectable	2011	60.0	40.0	0.0	55	67.8	30.6	1.7	180	66.0	32.8	1.3	235
	2013	46.6	53.4	0.0	73	67.2	31.9	1.0	204	61.7	37.5	0.7	277
	2015	67.9	32.1	0.0	56	67.1	32.2	0.7	146	67.3	32.2	0.5	202
Implant	2011	0.0	100.0	0.0	4	82.6	17.4	0.0	23	70.4	29.6	0.0	27
	2013	60.0	40.0	0.0	5	75.7	24.3	0.0	37	73.8	26.2	0.0	42
	2015	90.9	9.1	0.0	11	88.2	11.8	0.0	34	88.9	11.1	0.0	45
Oral Contraceptive Pills	2011	36.8	63.2	0.0	19	68.4	28.1	3.5	57	60.5	36.8	2.6	76
	2013	66.7	33.3	0.0	12	48.6	45.7	5.7	70	51.2	43.9	4.9	82
	2015	47.1	52.9	0.0	17	71.0	29.0	0.0	69	66.3	33.7	0.0	86
Condom	2011	50.0	50.0	0.0	2	15.4	33.3	51.3	39	17.1	34.1	48.8	41
	2013	10.0	30.0	60.0	10	21.6	49.0	29.4	51	19.7	45.9	34.4	61
	2015	33.3	33.3	33.3	6	32.6	67.4	0.0	43	32.7	63.3	4.1	49
<b>Total</b>	<b>2011</b>	<b>58.2</b>	<b>41.8</b>	<b>0.0</b>	<b>134</b>	<b>60.2</b>	<b>27.1</b>	<b>12.7</b>	<b>498</b>	<b>59.8</b>	<b>30.2</b>	<b>10.0</b>	<b>632</b>
	<b>2013</b>	<b>42.1</b>	<b>36.8</b>	<b>21.1</b>	<b>152</b>	<b>51.0</b>	<b>33.6</b>	<b>15.5</b>	<b>614</b>	<b>49.2</b>	<b>34.2</b>	<b>16.6</b>	<b>766</b>
	<b>2015</b>	<b>66.2</b>	<b>25.6</b>	<b>8.3</b>	<b>133</b>	<b>64.4</b>	<b>31.8</b>	<b>3.8</b>	<b>506</b>	<b>64.8</b>	<b>30.5</b>	<b>4.7</b>	<b>639</b>

## 4.2.3 SATISFACTION WITH AND REASONS FOR USING CURRENT METHOD

### 4.2.3.1 SATISFACTION WITH CURRENT METHOD AND REASONS

Table 5.15 presents the satisfaction level with the currently used modern FP method among the respondents. Three-fourths (75 to 82 %) of current users in all three surveys were very satisfied, with a higher proportion in the Mountain region than in the hills. Most of the rest were somewhat satisfied and few (about 3 to 8%) not satisfied.

**Table 4.15 Percent distribution of currently married women aged 15-49 years who are currently using a modern method of contraceptives by level of satisfaction and ecological belt**

Satisfaction	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Very	85.1	77.2	85.0	80.7	74.4	79.8	81.7	75.0	80.9
Somewhat	10.8	15.9	10.5	16.2	17.9	16.6	15.1	17.5	15.3
Not	4.1	6.9	4.5	3.1	7.7	3.6	3.3	7.5	3.8
<b>Total</b>	<b>148</b>	<b>145</b>	<b>133</b>	<b>555</b>	<b>574</b>	<b>506</b>	<b>703</b>	<b>719</b>	<b>639</b>

When looking at satisfaction by method in 2015, respondents who were very satisfied ranged from 64% for implants to 70% for injectable and 96 % for male sterilization. Not satisfied respondents ranged from 0% for male sterilization to 9 % for implants.

**Table 4.15b Percent distribution of currently married women aged 15-49 years who are currently using a modern method of contraceptives by how satisfied they were with their current method by method and ecological regions**

Current method used	Level of satisfaction												
	Survey year	Mountain				Hill				Both			
		Very	Somewhat	Not	Total	Very	Somewhat	Not	Total	Very	Somewhat	Not	Total
Female Sterilization	2011	100.0	0.0	0.0	12	93.8	4.9	1.2	81	94.6	4.3	1.1	93
	2013	77.8	22.2	0.0	9	87.0	8.7	4.3	69	85.9	10.3	3.8	78
	2015	70.0	20.0	10.0	10	91.8	6.6	1.6	61	88.7	8.5	2.8	71
Male Sterilization	2011	100.0	0.0	0.0	34	97.9	2.1	0.0	96	98.5	1.5	0.0	130
	2013	100.0	0.0	0.0	27	97.6	2.4	0.0	124	98.0	2.0	0.0	151
	2015	96.8	3.2	0.0	31	96.2	3.8	0.0	131	96.3	3.7	0.0	162
IUD	2011	50.0	0.0	50.0	8	81.8	18.2	0.0	22	73.3	13.3	13.3	30
	2013	66.7	22.2	11.1	9	89.5	10.5	0.0	19	82.1	14.3	3.6	28
	2015	100.0	0.0	0.0	2	86.4	9.1	4.5	22	87.5	8.3	4.2	24
Injectables	2011	83.6	14.5	1.8	55	63.9	28.9	7.2	180	68.5	25.5	6.0	235
	2013	75.3	16.4	8.2	73	53.9	32.8	13.2	204	59.6	28.5	11.9	277
	2015	76.8	16.1	7.1	56	67.8	26.0	6.2	146	70.3	23.3	6.4	202
Implants	2011	50.0	25.0	25.0	4	73.9	17.4	8.7	23	70.4	18.5	11.1	27
	2013	60.0	20.0	20.0	5	75.7	21.6	2.7	37	73.8	21.4	4.8	42
	2015	81.8	18.2	0.0	11	58.8	29.4	11.8	34	64.4	26.7	8.9	45
Pills	2011	78.9	21.1	0.0	19	78.9	19.3	1.8	57	78.9	19.7	1.3	76
	2013	66.7	25.0	8.3	12	68.6	12.9	18.6	70	68.3	14.6	17.1	82
	2015	94.1	0.0	5.9	17	71.0	24.6	4.3	69	75.6	19.8	4.7	86
Male Condoms	2011	100.0	0.0	0.0	2	84.6	15.4	0.0	39	85.4	14.6	0.0	41
	2013	60.0	30.0	10.0	10	84.3	15.7	0.0	51	80.3	18.0	1.6	61
	2015	100.0	0.0	0.0	6	81.4	18.6	0.0	43	83.7	16.3	0.0	49
<b>Total</b>	<b>2011</b>	<b>85.8</b>	<b>9.7</b>	<b>4.5</b>	<b>134</b>	<b>79.9</b>	<b>16.7</b>	<b>3.4</b>	<b>498</b>	<b>81.2</b>	<b>15.2</b>	<b>3.6</b>	<b>632</b>
	<b>2013</b>	<b>77.2</b>	<b>15.9</b>	<b>6.9</b>	<b>145</b>	<b>74.4</b>	<b>17.9</b>	<b>7.7</b>	<b>574</b>	<b>75.0</b>	<b>17.5</b>	<b>7.5</b>	<b>719</b>
	<b>2015</b>	<b>85.0</b>	<b>10.5</b>	<b>4.5</b>	<b>133</b>	<b>79.8</b>	<b>16.6</b>	<b>3.6</b>	<b>506</b>	<b>80.9</b>	<b>15.3</b>	<b>3.8</b>	<b>639</b>

Note: Those who used natural methods are excluded in this table

The majority of respondents (Ranging between 54-87%) who said they were very satisfied with their current method said it was because they thought the current method was effective. Other reasons given for being very satisfied by a significant number of current users were “no side effects, service center near (34% in 2013), and “easy to take”.

The reason given by almost all those who were not satisfied was ‘side effect(s)’ followed by service center too far and ineffective.

**Table 4.16 Percent distribution of currently married women aged 15-49 years who are currently using contraceptives by reasons for satisfaction and dissatisfaction from current method**

Reason for satisfaction	Level of satisfaction from current method Among very satisfied								
	Mountain			Hills			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Effective	93.7	50.9	74.6	85.0	54.9	73.7	86.9	54.1	73.9
No side effects	77.0	37.9	70.8	62.7	50.1	61.1	65.9	47.7	63.1
Easy to take	30.2	31.9	37.7	27.2	23.7	24.0	27.9	25.4	26.8
Inexpensive	11.1	6.0	4.6	4.9	6.5	5.4	6.3	6.4	5.2
Permanent method; long lasting method; confirm for 3 month	0.0	7.8	18.5	2.2	10.2	24.6	1.7	9.7	23.3
Service center too near		34.5			31.2			31.8	
It is safe for 3 months		0.0			0.7			0.5	
Do not want any more children		0.9			1.1			1.0	
<b>Total (n)</b>	<b>126</b>	<b>116</b>	<b>130</b>	<b>448</b>	<b>459</b>	<b>501</b>	<b>574</b>	<b>575</b>	<b>631</b>
Level of satisfaction from current method Among Not satisfied									
Reason for dissatisfaction									
Ineffective	33.3		14.3	23.5		0.0	26.1		4.0
Side effect	100.0	100.0	85.7	88.2	86.4	100.0	91.3	88.9	96.0
Difficult to use	33.3	0.0		5.9	4.5		13.0	3.7	
Expensive	33.3			0.0			8.7		
Service center too far	16.7	0.0		23.5	13.6		21.7	11.1	
Causes dizziness		0.0			9.1			7.4	
Excessive bleeding		0.0			20.5			16.7	
Causes irregular menstruation cycle		0.0			2.3			1.9	
Causes white water discharge		10.0			0.0			1.9	
Causes swelling in the uterus		0.0			2.3			1.9	
<b>Total (n)</b>	<b>6</b>	<b>10</b>	<b>7</b>	<b>17</b>	<b>44</b>	<b>18</b>	<b>23</b>	<b>54</b>	<b>25</b>

Table 4.17 shows the reasons respondents were very or somewhat satisfied by method. In 2013, the three reasons given by the most respondents for satisfaction with the temporary methods – injectables, pills, and condoms were: effective, no side effects and easy to take. Effectiveness and no side effects were also among the top three reasons given for satisfaction with male and female sterilization, implants and IUDs and the other was nearness of service center, which was also the fourth highest reason given for satisfaction with injectables.

**Table 4.17 Percent distribution of currently married women aged 15-49 years who are using modern methods of contraceptives by reasons for satisfaction (very or somewhat) with the method they are currently using**

Reason of satisfaction (very or somewhat) with current contraceptive method	FS			MS			IUD			Injectable			Implant			Pills			Condom			Total		
	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015
Effective	89.1	45.3	60.9	95.4	58.3	69.8	88.5	55.6	52.2	81.0	40.2	76.2	70.8	32.5	78.0	84.0	38.2	86.6	70.7	53.3	81.6	83.2	46.5	73.8
No side effects	59.8	49.3	52.2	67.7	36.4	50.0	65.4	37.0	60.9	43.0	33.2	33.3	33.3	40.0	61.0	69.3	50.0	64.6	78.0	68.3	79.6	60.7	43.3	50.6
Easy to take	6.5	5.3	7.2	6.2	2.6	3.7	42.3	11.1	17.4	59.7	36.9	76.2	29.2	20.0	31.7	25.3	44.1	24.4	36.6	45.0	38.8	30.1	26.0	34.3
Inexpensive	10.9	0.0	0.0	3.1	1.3	0.6	0.0	7.4	4.3	8.1	9.8	7.9	0.0	15.0	0.0	16.0	11.8	19.5	9.8	11.7	16.3	7.1	7.0	6.7
Permanent, long lasting	1.1	16.0	56.5	1.5	27.8	54.3	0.0	3.7	43.5	2.7	0.0	5.8	16.7	0.0	19.5	0.0	0.0	0.0	0.0	0.0	0.0	1.9	7.9	25.4
Service center near		41.3			47.0			37.0			27.0			47.5			5.9			3.3			28.8	
Works for long period		1.3			0.0			0.0			2.5			0.0			1.5			5.0			1.7	
It is safe for 3 months		0.0			0.0			0.0			3.3			0.0			0.0			0.0			1.1	
Side effect			2.9			0.0			4.3			2.6			4.9			1.2			0.0			1.8
Total (%)	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total (n)	92	75	69.0	130	151	162	26	27	23	221	244	189	24	40	41	75	68	82	41	60	49	680	712	615

#### 4.2.3.2 REASONS FOR DECIDING TO USE CURRENT METHOD

Table 4.18 Percent distribution of currently married women aged 15-49 years who are currently using a contraceptive by reasons for choosing it and ecological regions. The reasons for currently using a contraceptive are not consistent across surveys. The top five reasons (not ranked) for choosing current contraceptives were: very effective to prevent pregnancy, safe/few side effects, easy to use, disliked other methods, and, recommended by husband.

**Table 4.18** Presents the percent distribution of respondents who are currently using a contraceptive and their reasons for choosing it.

Description	Reasons (Multiple answer)								
	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Very effective to prevent pregnancy	85.8	30.9	33.1	80.1	33.6	38.9	81.3	33.0	37.7
Safe/few side effects	54.5	13.2	25.2	44.0	13.0	29.9	46.2	13.1	28.9
Easy to use	46.3	42.1	31.5	36.1	34.0	27.5	38.3	35.6	28.3
Disliked other methods	14.2	12.5	12.6	9.0	18.1	12.9	10.1	17.0	12.8
Recommended by service provider	11.9	3.9	0.0	6.2	5.2	7.0	7.4	5.0	5.5
Recommended by friends/relatives	9.0	9.2	3.1	2.4	7.5	4.3	3.8	7.8	4.1
Recommended by husband	40.3	43.4	8.7	16.9	42.0	11.1	21.8	42.3	10.6
Don't know about other method	1.5	3.3	1.6	1.2	0.8	0.4	1.3	1.3	0.7
Permanent , long lasting	-	5.3	23.6	3.8	9.6	25.8	3.0	8.7	25.4
Desire for no more children	-	28.9	35.4	4.8	37.0	37.5	3.2	35.4	37.1
Confirm for 3 months	-	27.6	30.7		22.1	17.4		23.2	20.2
Reliable method		20.4			25.2			24.3	
Can get it free of cost		0.0			0.2			0.1	
It is difficult to use any other method		0.7			0.2			0.3	
<b>Total (n)</b>	<b>134</b>	<b>152</b>	<b>133</b>	<b>498</b>	<b>614</b>	<b>506</b>	<b>632</b>	<b>766</b>	<b>639</b>

#### 4.2.4 FIRST USE OF CONTRACEPTIVE METHOD, AMONG MWRA WHO EVER USED CONTRACEPTION

In all three surveys, the median age at which the respondents used a contraceptive method for the first time was 23 years. Majority of the respondents said that they were between '20-24 years' when they first used a contraceptive followed by those being between '25-29 years' and 15-19 years of age.

Almost half of the total respondents, in all surveys, reported injectable to be the first method used. This was followed by Pills and Condoms. In the mountains, first method usage for injectable was higher than in hills. Almost ten percent said the first method they used was permanent (Table 4.19).

**Table 4.19 Percent distribution of currently married women aged 15-49 years who ever used a contraceptive by age at first using it, method first used and ecological regions**

Age at first use of contraceptive	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
15-19	21.2	19.5	18.4	20.9	18.7	23.8	20.9	18.9	22.7
20-24	35.5	39.5	37.1	37.6	38.2	39.6	37.1	38.5	39.1
25-29	22.7	23.3	25.8	23.4	24.1	23.5	23.2	24.0	23.9
30 -34	11.8	12.1	12.9	12.4	10.1	9.3	12.3	10.5	10.0
35 - 49	8.9	3.7	5.9	5.7	4.0	3.9	6.4	3.9	4.3
Don't Know		1.9			4.8			4.3	
Mean		23.9	24.5		23.8	23.5		23.8	23.7
Median	23	23	24	23	23	23	23	23	23
Std. Deviation	6.5	5.5	5.6	6.5	5.5	5.2	6.5	5.5	5.3
Range	14-41	15-40	15-43	14-41	15-45	14-43	14-41	15-45	14-43
<b>Total (n)</b>	<b>203</b>	<b>215</b>	<b>256</b>	<b>748</b>	<b>957</b>	<b>1026</b>	<b>951</b>	<b>1172</b>	<b>1282</b>
<b>Method first used</b>									
Female Sterilization	3.4	2.3	1.6	6.8	2.5	3.0	6.1	2.5	2.7
Male Sterilization	9.4	7.9	5.1	9.8	5.5	6.5	9.7	6.0	6.2
IUD	4.9	1.9	1.2	2.3	1.9	1.5	2.8	1.9	1.4
Injectables	52.2	51.6	52.7	44.9	49.1	37.1	46.5	49.6	40.2
Implants	2.0	2.3	2.7	1.3	2.3	1.5	1.5	2.3	1.7
Pills	12.8	14.0	18.4	12.3	18.0	17.7	12.4	17.2	17.9
Male Condoms	3.4	15.3	9.0	11.0	12.4	13.2	9.4	13.0	12.3
Rhythm/periodic abstinence	1.0	0.9	1.2	0.8	1.5	0.7	0.8	1.4	0.8
Withdrawal	10.8	3.7	8.2	10.8	6.5	18.8	10.8	6.0	16.7
Foams/Jelly		0.0			0.1			0.1	
Don't Know		0.0			0.1			0.1	
Do not want to answer		0.0			0.1			0.1	
<b>Total (n)</b>	<b>203</b>	<b>215</b>	<b>256</b>	<b>748</b>	<b>957</b>	<b>1026</b>	<b>951</b>	<b>1172</b>	<b>1282</b>

Distribution of married women aged 15-49 years who have ever used a contraceptive by age at first use, average age at first use, method first used and ecological regions are shown in Table 4.20.

**Table 4.20 Distribution of married women aged 15-49 years who ever used a contraceptive by age at first using it, average age at first using it, method first used and ecological regions**

Method first used	Survey year	Age at first use/ecological region																				
		15 to 24			25 to 34			35 to 44			44 to 49			DK			Total					
		M	H	B	M	H	B	M	H	B	M	H	B	M	H	B	M	H	B			
FS	2011	0.0	1.6	1.3	10.0	13.8	13.0	0.0	16.3	11.5										3.4	6.8	6.1
	2013	0.0	1.1	0.9	5.3	5.2	5.2	12.5	2.7	4.4		0.0	0.0	0.0	0.0	0.0	2.3	2.5	2.5			
	2015	0.0	0.0	0.0	1.1	2.7	2.4	4.5	4.1	4.2	0.0	9.5	7.0	0.0	2.5	1.8	1.6	3.0	2.7			
MS	2011	4.3	3.0	3.3	14.3	19.4	18.3	22.2	18.6	19.7							9.4	9.8	9.7			
	2013	6.3	2.6	3.3	9.2	10.1	9.9	12.5	10.8	11.1		0.0	0.0	25.0	4.3	6.0	7.9	5.5	6.0			
	2015	0.0	0.0	0.0	5.3	4.7	4.8	7.6	14.5	13.0	9.1	11.6	10.9	0.0	5.0	3.6	5.1	6.6	6.3			
IUD	2011	6.1	1.8	2.7	4.3	3.4	3.6	0.0	0.0	0.0							4.9	2.3	2.8			
	2013	0.8	1.7	1.5	3.9	2.1	2.5	0.0	2.7	2.2		0.0	0.0	0.0	2.2	2.0	1.9	1.9	1.9			
	2015	0.0	0.0	0.0	2.1	1.7	1.8	1.5	2.1	2.0	0.0	3.2	2.3	0.0	0.0	0.0	1.2	1.5	1.4			
Injectable	2011	53.9	46.0	47.6	50.0	41.8	43.5	50.0	53.5	52.5							52.2	44.9	46.5			
	2013	50.4	46.8	47.5	53.9	51.8	52.2	50.0	62.2	60.0		100.0	100.0	50.0	45.7	46.0	51.6	49.1	49.6			
	2015	36.2	23.3	25.4	49.5	41.4	42.9	59.1	39.0	43.3	72.7	40.0	48.4	53.3	62.5	60.0	52.7	37.3	40.4			
Implant	2011	0.0	0.5	0.4	5.7	2.2	3.0	0.0	4.7	3.3							2.0	1.3	1.5			
	2013	1.6	0.6	0.7	2.6	4.6	4.2	12.5	5.4	6.7		0.0	0.0	0.0	4.3	4.0	2.3	2.3	2.3			
	2015	2.1	0.4	0.7	5.3	1.0	1.8	0.0	2.5	2.0	3.0	3.2	3.1	0.0	2.5	1.8	2.7	1.5	1.7			
Pills	2011	14.8	14.2	14.3	7.1	10.4	9.8	22.2	4.7	9.8							12.8	12.3	12.4			
	2013	13.4	18.7	17.7	14.5	17.4	16.8	12.5	10.8	11.1		0.0	0.0	25.0	19.6	20.0	14.0	18.0	17.2			
	2015	25.5	16.3	17.8	18.9	19.2	19.2	13.6	19.1	17.9	15.2	14.7	14.8	20.0	12.5	14.5	18.4	17.8	17.9			
Condom	2011	4.3	16.0	13.6	2.9	4.1	3.8	0.0	2.3	1.6							3.4	11.0	9.4			
	2013	22.0	18.3	19.0	6.6	5.2	5.4	0.0	0.0	0.0		0.0	0.0	0.0	4.3	4.0	15.3	12.4	13.0			
	2015	14.9	19.2	18.5	10.5	16.0	15.0	7.6	7.5	7.5	0.0	3.2	2.3	6.7	7.5	7.3	9.0	13.2	12.4			
Rhythm/ Periodic abstinence	2011	1.7	1.1	1.3	0.0	0.4	0.3	0.0	0.0	0.0							1.0	0.8	0.8			
	2013	1.6	2.2	2.1	0.0	0.3	0.2	0.0	2.7	2.2		0.0	0.0	0.0	0.0	0.0	0.9	1.5	1.4			
	2015	4.3	1.3	1.7	1.1	0.5	0.6	0.0	0.8	0.7	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.7	0.8			
Withdrawal	2011	14.8	15.8	15.6	5.7	4.5	4.7	5.6	0.0	1.6							10.8	10.8	10.8			
	2013	3.9	7.9	7.1	3.9	3.4	3.5	0.0	2.7	2.2		0.0	0.0	0.0	15.2	14.0	3.7	6.5	6.0			
	2015	17.0	39.6	35.9	6.3	12.8	11.6	6.1	10.4	9.4	0.0	14.7	10.9	20.0	7.5	10.9	8.2	18.5	16.4			
Foams/Jelly	2011																					
	2013	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1			
	2015																					
No answer	2011																					
	2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	2.2	2.0	0.0	0.1	0.1			
	2015																					
DK	2011																					
	2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	2.2	2.0	0.0	0.1	0.1			
	2015																					
<b>Total (n)</b>	<b>2011</b>	<b>115</b>	<b>437</b>	<b>552</b>	<b>70</b>	<b>268</b>	<b>338</b>	<b>18</b>	<b>43</b>	<b>61</b>							<b>203</b>	<b>748</b>	<b>951</b>			
	<b>2013</b>	<b>127</b>	<b>545</b>	<b>672</b>	<b>76</b>	<b>328</b>	<b>404</b>	<b>8</b>	<b>37</b>	<b>45</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>46</b>	<b>50</b>	<b>215</b>	<b>957</b>	<b>1172</b>			
	<b>2015</b>	<b>47</b>	<b>244</b>	<b>291</b>	<b>95</b>	<b>406</b>	<b>501</b>	<b>66</b>	<b>241</b>	<b>307</b>	<b>33</b>	<b>95</b>	<b>128</b>	<b>15</b>	<b>40</b>	<b>55</b>	<b>256</b>	<b>1026</b>	<b>1282</b>			

Method first used	Age at first use/ecological regions															
	Mountain						Hill					Both				
	Survey Year	Mean	Median	SD	Range	N	Mean	Median	SD	Rangr	N	Mean	Median	SD	Range	N
FS	2011	28.6	28.0	2.7	25-33	7	29.1	28.0	4.5	21-40	51	29.0	28.0	4.3	21-40	58
	2013	31.0	30.0	5.2	27-40	5	27.2	26.5	3.8	21-36	24	27.8	27.0	4.3	21-40	29
	2015	25.5	27.0	3.8	20-28	4	27.1	26.0	4.3	21-38	31	26.9	26.0	4.2	20-38	35
MS	2011	29.1	28.0	5.4	22-40	19	28.8	28.0	4.2	20-38	73	28.8	28.0	4.4	20-40	92
	2013	25.7	24.5	3.9	21-35	16	26.6	26.0	4.4	18-37	51	26.4	26.0	4.3	18-37	67
	2015	26.3	25.0	4.4	20-33	13	26.6	26.0	3.7	21-38	67	26.6	26.0	3.8	20-38	80
IUD	2011	23.3	22.5	4.3	17-33	10	25.5	25.0	3.5	20-33	17	24.7	23.0	3.9	17-33	27
	2013	26.5	28.0	3.7	21-29	4	25.2	24.0	4.6	20-36	17	25.4	26.0	4.4	20-36	21
	2015	24.7	24.0	1.2	24-26	3	25.7	25.0	4.6	20-34	15	25.5	24.5	4.2	20-34	18
Injectables	2011	24.4	23.0	5.8	15-38	106	24.5	23.0	5.1	16-41	336	24.5	23.0	5.3	15-41	442
	2013	24.3	23.0	5.3	16-40	109	24.3	23.0	5.1	15-45	449	24.3	23.0	5.1	15-45	558
	2015	25.4	25.0	5.4	16-43	135	24.5	23.0	5.3	16-43	381	24.7	24.0	5.3	16-43	516
Implants	2011	29.5	28.5	3.1	27-34	4	29.9	31.0	6.7	19-40	10	29.8	30.0	5.8	19-40	14
	2013	26.4	25.0	6.1	20-35	5	28.6	27.5	5.7	18-42	20	28.1	27.0	5.8	18-42	25
	2015	22.6	20.0	5.2	19-34	7	26.7	26.0	5.3	19-41	15	25.4	24.5	5.5	19-41	22
Pills	2011	24.7	22.0	7.3	14-41	26	23.4	22.0	5.2	14-40	92	23.7	22.0	5.7	14-41	118
	2013	23.9	23.0	5.5	16-39	29	23.8	23.0	4.8	17-43	163	23.8	23.0	4.9	16-43	192
	2015	23.7	22.0	5.6	16-37	47	23.3	22.0	4.5	16-38	182	23.3	22.0	4.8	16-38	229
Male Condoms	2011	22.1	22.0	2.9	19-27	7	19.7	18.5	3.8	15-35	82	19.9	19.0	3.7	15-35	89
	2013	20.7	20.0	3.8	15-31	33	20.7	20.0	3.3	15-30	117	20.7	20.0	3.4	15-31	150
	2015	22.5	22.0	4.9	16-38	23	21.5	21.0	4.4	15-41	135	21.7	21.0	4.5	15-41	158
Rhythm/ Periodic abstinence	2011	22.5	22.5	2.1	21-24	2	22.3	22.0	4.8	17-31	6	22.4	22.0	4.1	17-31	8
	2013	20.0	20.0	1.4	19-21	2	20.7	20.0	5.0	15-35	14	20.6	20.0	4.6	15-35	16
	2015	19.0	18.0	3.6	16-23	3	22.1	22.0	5.1	17-29	7	21.2	20.0	4.7	16-29	10
Withdrawal	2011	22.0	20.0	6.1	14-38	22	20.4	20.0	4.0	14-34	81	20.8	20.0	4.6	14-38	103
	2013	23.0	20.0	6.6	15-33	8	21.1	20.0	4.5	15-40	55	21.4	20.0	4.8	15-40	63
	2015	22.9	20.0	7.5	15-40	21	20.8	19.0	4.9	14-41	193	21.0	19.5	5.3	14-41	214
Foams/Jelly	2011	0.0	0.0	0.0	0-0	0	0.0	0.0	0.0	0-0	0	0.0	0.0	0.0	0-0	0
	2013	0.0	0.0	0.0	0-0	0	22.0	22.0	0.0	22-22	1	22.0	22.0	0.0	22-22	1
	2015															
<b>Total</b>	<b>2011</b>	<b>24.7</b>	<b>23.0</b>	<b>6.0</b>	<b>14-41</b>	<b>203</b>	<b>24.2</b>	<b>23.0</b>	<b>5.5</b>	<b>14-41</b>	<b>748</b>	<b>24.3</b>	<b>23.0</b>	<b>5.6</b>	<b>14-41</b>	<b>951</b>
	<b>2013</b>	<b>23.9</b>	<b>23.0</b>	<b>5.3</b>	<b>15-40</b>	<b>211</b>	<b>23.8</b>	<b>23.0</b>	<b>5.0</b>	<b>15-45</b>	<b>911</b>	<b>23.8</b>	<b>23.0</b>	<b>5.1</b>	<b>15-45</b>	<b>1122</b>
	<b>2015</b>	<b>24.5</b>	<b>23.5</b>	<b>5.6</b>	<b>15-43</b>	<b>256</b>	<b>23.5</b>	<b>23.0</b>	<b>5.2</b>	<b>14-43</b>	<b>1026</b>	<b>23.7</b>	<b>23.0</b>	<b>5.3</b>	<b>14-43</b>	<b>1282</b>

Note: M=Mountain, H=Hill and B=Both mountain and hill

Table 4.21 shows, the median and mean numbers of children when respondents first used a contraceptive were 2 years in all three surveys, but the number ranged from zero to eight children. Majority of the respondents in all three surveys said that they had ‘1 child’ when they first used contraceptive. Two children, three children and no children followed this.

The table also shows the age of the youngest child at the time of first use of contraceptives. The median age of the youngest child was 12 months in 2013 and 2015 as against 8 months in 2011. Majority (about half) also said that their child was less than one year when they first used contraceptive.

**Table 4.21 Percent distribution of respondents who had at least one child by number of children and age of the youngest child at the time of first using any contraceptive method**

Number of living children at use of FP first	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
None	13.3	15.3	11.3	15.8	13.3	19.5	15.2	13.7	17.8
1	34.0	31.2	27.3	29.7	34.0	30.9	30.6	33.5	30.2
2	19.7	20.5	28.1	22.5	22.8	22.3	21.9	22.4	23.5
3	11.3	14.9	18.0	16.3	14.5	15.4	15.2	14.5	15.9
4	10.8	13.0	9.4	9.5	8.7	7.7	9.8	9.5	8.1
5 +	10.8	5.1	5.9	6.3	6.7	4.5	7.2	6.4	4.8
Mean	2.1	2.0	2.1	2.0	2.0	1.8	2.0	2.0	1.8
Median	2.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2
Std. Deviation	1.7	1.5	1.4	1.5	1.5	1.4	1.5	1.5	1.4
Range	0-7	0-7	0 - 7	0-8	0-8	0 - 8	0-8	0-8	0 - 8
<b>Total (n)</b>	<b>203</b>	<b>215</b>	<b>256</b>	<b>748</b>	<b>957</b>	<b>1026</b>	<b>951</b>	<b>1172</b>	<b>1282</b>
<b>Age of youngest child at first use</b>									
Less than one year	59.7	43.0	49.8	63.0	40.9	46.5	62.3	41.3	47.2
1 year	26.1	31.8	26.9	22.4	32.8	30.0	23.2	32.6	29.3
2 year	9.1	14.0	14.5	9.4	13.0	13.0	9.3	13.2	13.3
3year	1.7	2.8	4.4	3.3	5.8	5.2	3.0	5.2	5.0
4 or more year	3.4	8.4	4.4	1.9	7.5	5.2	2.2	7.7	5.0
Median (in month)	6	12	12	8	12	12	8	12	12
Std. Deviation	14	19	15.56	11	19	16.73	12	19	16.48
<b>Total (n)</b>	<b>176</b>	<b>179</b>	<b>227</b>	<b>630</b>	<b>799</b>	<b>823</b>	<b>806</b>	<b>978</b>	<b>1050</b>

#### 4.2.5 FUTURE INTENTIONS REGARDING USE OF CONTRACEPTIVE METHODS

Table 4.22 shows that, of the total respondents not using permanent methods in 2011, 34 % said that they would like to have another child. This percentage decreased to 26 % in 2015. The percentage of respondents wanting to have children in the future was higher in the mountains in 2011 (35% vs 34%) and 2013 (38% vs 27%) than in the hills. This was reversed in 2015 (20 vs 28 %).

Over 86 % of these respondents aged between ‘15-19 years’ said they wanted to have children in the future, compared to about half of those aged 20-29 years, while only few of respondents

aged between '30-49 years' said they wanted to have (more) children. This is probably because younger women have fewer children.

**Table 4.22 Percent distributions of currently married women aged 15-49 years not using permanent method and want to have (more) children in the future by selected background characteristics**

Characteristics	Yes			No			Don't Know			Total(n)			Total %
	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	
Region of residence													
Mountain	35.1	37.8	19.5	64.9	61.6	80.5		0.7	0.0	259	294	205	100
Hill	33.6	26.7	28.1	66.6	72.1	71.8		1.2	0.1	918	1097	805	100
Age of women (in years)													
15 to 19	95.4	90.9	86.2	4.6	9.1	13.8		0.0	0.0	87	77	29	100
20 to 29	46.3	45.6	45.0	53.7	52.2	54.8		2.3	0.2	596	619	504	100
30 - 49	8.1	7.5	2.9	91.9	92.4	97.1		0.1	0.0	494	695	477	100
Number of living children													
0	95.5	93.8	97.4	4.5	6.3	2.6		0.0	0.0	110	112	39	100
1	79.7	73.5	75.8	20.3	24.4	23.7		2.1	0.4	276	283	236	100
2	14.5	13.2	11.6	85.5	85.0	88.4		1.7	0.0	332	401	329	100
3	9.4	8.6	4.4	90.6	91.0	95.6		0.4	0.0	203	266	205	100
4	5.0	3.8	0.0	95.0	95.6	100.0		0.6	0.0	121	159	114	100
5 or more	0.7	5.3	2.3	99.3	94.7	97.7		0.0	0.0	135	170	87	100
Level of education													
None	22.8	20.0	9.7	77.2	79.3	90.1		0.6	0.3	600	619	352	100
Primary	36.2	26.4	18.3	63.8	71.8	81.7		1.8	0.0	213	273	218	100
Secondary	48.8	35.3	41.3	51.2	63.3	58.7		1.4	0.0	209	215	235	100
SLC or higher	53.5	46.5	46.3	46.5	52.5	53.7		1.1	0.0	155	284	205	100
Religion													
Hindu	34.0	28.5	25.5	66.0	70.6	74.3		0.8	0.1	898	1209	803	100
Others	33.7	32.4	29.5	66.3	64.8	70.5		2.7	0.0	279	182	207	100
Caste ethnicity													
Chhetri													
Brahman	33.8	28.4	23.6	66.2	71.0	76.4		0.6	0.0	390	545	348	100
Janajati	33.5	29.1	30.4	66.5	69.8	69.6		1.1	0.0	538	454	160	100
Dalits	36.5	32.3	19.4	63.5	65.1	80.0		2.6	0.6	181	232	451	100
Newars	30.9	24.3	31.4	69.1	75.7	68.6		0.0	0.0	68	74	51	100
Madhesi caste		28.9			69.7			1.3			76		100
Migration status													
Migrant	34.4	28.3	30.8	65.6	71.2	68.5		0.4	0.7	992	226	143	100
Non Migrant	31.4	29.2	25.6	68.6	69.6	74.4		1.2	0.0	185	1165	867	100
Exposure to radio and/or TV													
None	31.0	23.4	17.0	69.0	75.3	82.4		1.3	0.6	87	611	159	100
One	33.9	34.8	21.9	66.1	64.2	78.1		1.0	0.0	596	597	311	100
Both	38.50	29.0	31.7	61.50	70.5	68.3		0.5	0.0	494	183	540	100
SES index													
Poorest	30.2	35.2	13.7	69.8	64.4	86.3		0.3	0.0	275	298	168	100
Second	33.1	25.4	22.9	66.9	73.9	76.6		0.7	0.5	245	287	205	100
Third	31.3	29.2	25.1	68.8	69.0	74.9		1.8	0.0	224	274	211	100
Fourth	39.7	28.7	29.7	60.3	69.5	70.3		1.8	0.0	224	279	212	100
Richest	36.4	26.1	37.4	63.6	73.1	62.6		0.8	0.0	209	253	214	100
<b>Total</b>	<b>33.9</b>	<b>29.0</b>	<b>26.3</b>	<b>66.1</b>	<b>69.9</b>	<b>73.6</b>		<b>1.1</b>	<b>0.1</b>	<b>1177</b>	<b>1391</b>	<b>1010</b>	<b>100</b>

As we can see from table 4.22, almost all respondents with no children (over 93%) wanted to have children in the future, and about three-fourths (over 73%) of those with one child said they wanted more children in future. Less than 15% of those with 2 children said they wanted more children and less than 10% of those with three or more children wanted more children. Desire for (more) children increased with level of education. Desire to have more children by religion did not show consistent pattern across the survey years. Similar results are shown in when analyzed by caste/ethnicity, migration, and SES status. Fewer respondents who were exposed to TV or radio wanted to have (more) children than those who were exposed to both TV and radio except in 2013.

Table 4.23 shows the percentage of women who desire to have children in a given period. Majority of the respondents (over 57 to 64% ) who wanted to have (more) children in the future said that they would like to become pregnant (again) after 2 years followed by between 1 and 2 years, and in the next 3-6 months.

**Table 4.23 Percentage of currently married women aged 15-49 who are not using a permanent method of contraceptives and want to have more children in future by desired time for becoming pregnant again and ecological regions**

Want to have children in future	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
In next 3-6 months	8.8	10.6	0.0	11.4	6.2	3.1	10.8	7.4	2.7
In next 6-12 months	6.6	4.4	5.0	5.8	7.2	0.9	6.0	6.4	1.5
From 1-2 years	7.7	11.5	25.0	14.6	15.7	31.7	13.0	14.6	30.7
More than 2 years from now	64.8	68.1	67.5	54.2	62.1	63.4	56.6	63.7	64.0
Do not know	12.1	5.3	2.5	14.0	8.8	0.9	13.5	7.9	1.1
<b>Total (n)</b>	<b>91</b>	<b>113</b>	<b>40</b>	<b>308</b>	<b>306</b>	<b>224</b>	<b>399</b>	<b>419</b>	<b>264</b>

Table 4.24 shows the percentage distribution of the respondents not using permanent methods by intention to use or continue to use any contraceptive methods in the future. The proportion of women who intended to use the methods they were using has increased in 2015 as compared to 2011. For example, in 2011 83% of the respondents (84% in mountains) said that they intended to continue to use the method they were using increased to 91% (89% in mountains) in 2015. This shows that intention to use a FP method in future among the currently married women in the hard to reach district is increasing.

Among the different methods for future use, the injectable was most often mentioned in all surveys. A number of methods such as male sterilization, implants and pills were mentioned by between 10 and 15% of respondents.

**Table 4.24** Percent distribution of currently married women aged 15-49 years who are not using a permanent method of contraceptives by intention to use or continue to use any modern contraceptive methods in future, method intend to use and ecological regions, FP/RH/MCH survey, 2011

Intention to use any modern method	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Yes	84.2	87.8	89.3	83.3	77.9	91.2	83.5	80.0	90.8
No	15.8	10.5	10.7	16.7	18.0	8.8	16.5	16.5	9.2
Don't Know		1.7			4.0			3.5	
<b>Total</b>	<b>259</b>	<b>294</b>	<b>205</b>	<b>918</b>	<b>1097</b>	<b>805</b>	<b>1177</b>	<b>1391</b>	<b>1010</b>
<b>Type of method intend to use (Multi response)</b>									
Female Sterilization	5.0	12.0	5.5	11.4	19.9	10.1	10.0	18.1	9.2
Male Sterilization	9.2	13.6	12.6	15.8	15.4	10.5	14.3	15.0	10.9
IUD	10.6	10.5	8.7	10.8	7.1	9.7	10.8	7.9	9.5
Injectables	61.0	53.5	36.1	35.7	40.4	31.9	41.3	43.4	32.7
Implants	8.7	9.3	15.3	10.7	11.2	16.3	10.3	10.8	16.1
Pills	18.8	10.1	16.9	11.4	13.8	14.2	13.0	12.9	14.7
Male Condoms	12.4	8.1	4.9	6.3	11.0	7.5	7.6	10.3	7.0
Rhythm/periodic abstinence	0.5	1.6	2.2	1.4	1.9	0.5	1.2	1.8	0.9
Withdrawal	4.6	1.9	6.6	3.7	5.5	12.0	3.9	4.7	10.9
Emergency contraception		0.0			0.1			0.1	
Postpartum amenorrhea	0.5			--			0.1		
Avoid sex	--			0.9			0.7		
Don't Know/NR	1.8	2.3	0.5	5.2	2.5	0.1	4.5	2.4	0.2
<b>Total (n)</b>	<b>218</b>	<b>258</b>	<b>183</b>	<b>765</b>	<b>855</b>	<b>734</b>	<b>983</b>	<b>1113</b>	<b>917</b>

Table 4.25 presents the contraceptive methods respondents are currently using and methods which they intend to use in the future. Among those who were not currently using a method, majority in each surveys intended to use injectable followed by sterilization and pills.

Over half of injectable users intend to continue using injectables and about 20 % in 2015 said they would switch to either male or female sterilization. Similarly almost half of pill users said they would continue with pills. Among current condom users, almost 40% said they'd continue with condoms.

**Table 4.25 Percent distribution of currently married women aged 15-49 years not using permanent contraceptive method but intend to use in future by method of FP currently using and the method they intend to use in future**

Future method intended to use	Current FP method Used						
	Currently not using	IUD	Injectable	Implant	OCP	Condom	Natural
	2011						
Female Sterilization	11.9	0.0	8.6	7.4	12.0	7.5	3.4
Male Sterilization	15.2	3.4	14.7	3.7	10.7	22.5	10.2
IUD	9.8	82.8	5.6	3.7	6.7	10.0	8.5
Injectable	31.3	3.4	62.5	0.0	13.3	12.5	27.1
Implants	8.3	3.4	6.0	85.2	1.3	2.5	3.4
Pills	9.2	0.0	0.4	0.0	53.3	0.0	1.7
Male Condoms	4.4	0.0	1.7	0.0	0.0	40.0	3.4
Natural	2.7	0.0	0.0	0.0	1.3	0.0	42.4
Do not know	7.3	6.9	0.4	0.0	1.3	5.0	0.0
<b>Total (n)</b>	<b>521</b>	<b>29</b>	<b>232</b>	<b>27</b>	<b>75</b>	<b>40</b>	<b>59</b>
2013							
Female Sterilization	26.1	3.7	15.69	4.76	16.25	15.25	12.5
Male Sterilization	17.64	11.12	10.97	7.15	12.5	15.26	10
IUD	2.03	81.48	3.64	0	7.5	20.34	12.5
Injectables	25.42	0	58.76	0	11.25	6.78	20
Implants	7.46	0	8.39	83.33	3.75	0	2.5
Pills	9.49	3.7	1.82	0	47.5	0	5
Male Condoms	6.44	0	0	2.38	1.25	38.98	5
Natural	2.71	0	0	0	0	3.39	27.5
Don't Know/NR	2.71	0.00	0.73	2.38	0.00	0.00	5.00
<b>Total (n)</b>	<b>295</b>	<b>27</b>	<b>274</b>	<b>42</b>	<b>80</b>	<b>59</b>	<b>40</b>
2015							
Female Sterilization	11.4	0.0	9.0	8.9	9.3	4.1	5.9
Male Sterilization	14.2	4.3	10.5	8.9	4.7	14.3	8.9
IUD	9.3	87.0	3.0	6.7	8.1	4.1	5.9
Injectables	31.5	0.0	66.0	4.4	7.0	12.2	10.7
Implants	11.1	4.3	9.5	71.1	11.6	12.2	7.1
Pills	13.4	4.3	2.0	0.0	59.3	4.1	1.8
Male Condoms	4.1	0.0	0.0	0.0	0.0	49.0	16.0
Natural	4.9	0.0	0.0	0.0	0.0	0.0	43.8
Don't Know/NR							
<b>Total (n)</b>	<b>387</b>	<b>23</b>	<b>200</b>	<b>45</b>	<b>86</b>	<b>49</b>	<b>169</b>

Note: Women with respect to method intended to use in future have reported more than one method. For the purpose of the analysis, the method that was the highest was considered as the single method reported as method intended to use in future.

#### **4.2.6 REASONS FOR NON-USE OF CONTRACEPTIVE METHODS – FUTURE, PRESENT, EVER**

Table 4.26 presents the reasons for not planning to use any modern method in future. The reasons are not consistent across three surveys. However, some of the important reasons based on their responses (not in rank order) are husband away from home or stays outside,

health concerns, fear of side effects, infrequent sex (which increases the chance of unwanted pregnancy) and menopausal/hysterectomy.

**Table 4.26 Percent distribution of currently married women aged 15-49 years not using permanent method and reporting to have no intention to use a method in future by reasons and ecological regions**

Reasons for not planning to use any modern method in future (Multiple response)	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Currently pregnant		2.8	0.0		0.0	0.0		0.4	0.0
Fatalistic/up to God	-	2.8	4.5	2.0	3.3	2.8	1.5	3.2	3.2
Fear side effects		5.6	27.3		14.0	15.5		12.9	18.3
Health concerns	26.8	8.3	9.1	28.1	17.8	7.0	27.8	16.5	7.5
Husband away from home or stays outside	38.9	31.8		25.2	50.7		27.0	46.2	
Inconvenient to use	-	0.0	0.0	1.3	1.2	1.4	1.0	1.1	1.1
Knows no method	-	0.0	0.0	0.7	4.5	0.0	0.5	4.0	0.0
Knows no source	4.9	2.8	0.0	0.7	0.4	0.0	1.5	0.7	0.0
Religious prohibition		2.8	0.0		0.0	0.0		0.4	0.0
Don't Know	2.4	2.8	0.0	0.7	7.0	0.0	1.0	6.5	0.0
Husband opposed	4.9	16.7	0.0	7.8	5.4	0.0	7.2	6.8	0.0
Infrequent sex	26.8	22.2	18.2	35.9	12.4	22.5	34.0	13.7	21.5
Interfere with body		2.8	40.9		11.6	5.6		10.4	14.0
Menopausal, hysterectomy	53.7	11.1	0.0	24.8	14.9	0.0	30.9	14.4	0.0
Other (using natural method)	-		0.0	0.7		0.0	0.5		0.0
Respondent opposed	2.4	5.6	40.9	7.8	11.2	14.1	6.7	10.4	20.4
Sub-fecund, in-fecund		11.1	0.0		5.4	0.0		6.1	0.0
Wants more children	9.8	16.7	0.0	20.9	7.4	0.0	18.6	8.6	0.0
<b>Total (n)</b>	<b>41</b>	<b>36</b>	<b>22</b>	<b>153</b>	<b>242</b>	<b>71</b>	<b>194</b>	<b>278</b>	<b>93</b>

Table 4.27 gives information regarding the respondents' reasons for not currently using and never using contraceptive methods. The reason given by the most respondents for both not currently using and never using contraception were: husband away from home and infrequent sex. Other reasons given were menopausal/hysterectomy, already pregnant, child too young/no resumption of menses, health concerns, and fear side effects, and interference with body. For those who have never used, said they wanted more children.

**Table 4.27 Percent distribution of currently married women aged 15-49 years by reasons for not currently using (among those who used in the past) and never using contraceptive methods, and ecological regions**

Description	Not currently using but have used in the past									Never users								
	Mountain			Hill			Both			Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Reproductive health cycle issues</b>																		
Menopausal, hysterectomy.	14.5	6.3	10.6	7.3	8.2	6.9	8.9	7.9	7.6	9.3	4.3	1.9	4.4	5.1	6.0	5.5	4.9	4.7
Sub-fecund, in-fecund	9.1	0.0	0.0	1.6	0.9	1.5	3.2	0.7	1.2	5.2	1.7	0.0	1.8	2.5	0.9	2.5	2.3	0.6
Pregnant	5.5	11.1	10.6	6.2	7.6	6.6	6	8.1	7.4	-	0.0		-	0.0		-	0.0	
Child too young/no resumption of menses	7.3	15.9		6.7	8.5		6.9	9.6		-	0.0	1.0	-	0.0	2.1	-	0.0	1.8
<b>Spousal issues</b>																		
Infrequent sex	21.8	3.2	21.2	20.7	9.6	11.3	21	8.6	13.3	28.9	16.5	21.2	32.5	11.7	22.6	31.7	13.0	22.2
Husband away from home	32.7	36.5	45.2	50.3	48.4	60.5	46.4	46.6	57.4	10.3	33.9	26.9	21.3	37.7	43.2	18.9	36.7	38.2
<b>Method dissatisfaction or health issues</b>																		
Health concerns	18.2	12.7	11.5	10.4	11.4	5.4	12.1	11.6	6.6	7.2	9.6	28.8	15.7	8.5	17.5	13.8	8.8	21.0
Fear side effects		9.5			9.9			9.9			10.4			12.3			11.8	
Interfere with body		12.7	10.6		8.7	3.7		9.4	5.1		0.0	1.9		2.5	0.0		1.9	0.6
Inconvenient to use	1.8	1.6	1.0	-	0.0	0.0	0.4	0.2	0.2	2.1	2.6	1.9	1.2	0.9	1.3	1.4	1.4	1.5
<b>Access issues</b>																		
Knows no method	-	0.0		-	0.6		-	0.5		9.3	7.0	15.4	2.1	2.5	2.6	3.7	3.7	6.5
Lack of access	1.8	1.6		-	0.9		0.4	1.0		3.1	1.7	1.9	1.8	0.3	0.0	2.1	0.7	0.6
Knows no source	-	0.0		0.5	0.3		0.4	0.2		2.1	1.7	5.8	0.6	0.0	0.0	0.9	0.5	1.8
<b>Oppositions</b>																		
Husband opposed	5.5	7.9	3.8	2.6	1.7	2.0	3.2	2.7	2.3	14.4	7.8	12.5	9.8	7.6	9.4	10.8	7.7	10.4
Respondent opposed	3.6	1.6	3.8	0.5	4.4	2.9	1.2	3.9	3.1	7.2	6.1	9.6	6.5	8.5	4.7	6.7	7.9	6.2
Others opposed		0.0			0.0			0.0			0.0			0.9			0.7	
<b>Other issues</b>																		
Wants more children	14.5	7.9	1.0	7.3	3.8	3.7	8.9	4.4	3.1	45.4	22.6	30.8	37.6	22.8	41.0	39.3	22.7	37.9
Fatalistic/up to God	-	0.0	0.0	-	1.2	0.5	-	1.0	0.4	1	0.9	1.0	1.8	2.5	1.7	1.6	2.1	1.5
Religious prohibit		1.6			0.0			0.2			0.0			0.3			0.2	
Baby is too small		0.0	10.6		0.6	10.8		0.5	10.7		0.0			0.0			0.0	
Lactating mother		0.0			0.0			0.0			6.1	9.6		7.0	3.0		6.7	5.0
Recently married		0.0			0.0			0.0			1.7			2.8			2.6	
Currently pregnant		0.0			0.0			0.0			2.6			2.5			2.6	
Don't know	-			-			-			4.1			0.9			1.6		
<b>Total (n)</b>	<b>55</b>	<b>63</b>	<b>104</b>	<b>193</b>	<b>343</b>	<b>408</b>	<b>248</b>	<b>406</b>	<b>512</b>	<b>97</b>	<b>115</b>	<b>104</b>	<b>338</b>	<b>316</b>	<b>234</b>	<b>435</b>	<b>431</b>	<b>338</b>

Note: There were 17 respondents who did not respond in 2013 so the total n is 431 instead of total never users 448.

## 4.3 INJECTABLE CONTRACEPTIVES

### 4.3.1 EXPOSURE TO MESSAGES IN THE LAST 6 MONTHS

Table 4.28 shows the percent distribution of the respondents, who have heard or seen any messages/information about injectables in the prior six months and the sources of that information. In 2011, 59% of the respondents said they heard or saw any messages or information about injectables in the last six months which in 2015 increased to 78 %. The table shows that respondents in the hills were more likely to recall any message about injectables than those in the mountains (in all three surveys).

**Table 4.28 Percent distribution of currently married women aged 15-49 years who have heard or seen any messages or information on injectable contraceptives in the last 6 months by source and ecological regions**

Heard or seen ANY messages/information from any source about Injectable?	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Yes	57.7	45.2	71.1	58.7	54.9	79.9	58.5	52.9	78.0
No	42.0	51.8	28.6	38.4	42.9	20.0	39.2	44.8	21.9
Don't Know	0.3	3.0	0.3	2.8	2.2	0.1	2.3	2.3	0.1
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>
<b>Source of information on Injectables in the last 6 months (Multiple response)</b>									
Radio	38.6	59.7	47.3	59.1	48.3	66.9	54.7	50.3	62.9
Television	3.4	7.4	9.4	13.5	28.8	36.1	11.4	25.1	30.7
Newspaper/magazine/broacher	2.8	0.7	0.4	1.9	4.1	2.7	2.1	3.5	2.2
Poster/Hoarding Board	2.3	1.3	10.2	0.8	9.2	7.2	1.1	7.8	7.8
Street dramas		0.0	0.0		0.1	0.2		0.1	0.2
In a shop	0.6	0.0	0.0	1.6	3.7	0.5	1.3	3.0	0.4
Husband	-		3.9	0.3		4.7	0.2		4.5
Friends/Relatives	73.9	19.5	44.1	51.6	18.9	40.9	56.4	19.0	41.6
Neighbor	29.5	12.8	24.2	27.4	15.3	22.6	27.8	14.8	23.0
FCHV	27.3	41.6	37.9	15.6	40.0	50.8	18.1	40.3	48.2
Health workers/Health facility	5.7	31.5	56.6	16.3	36.6	42.7	14.0	35.7	45.5
Cinema hall/Theater		0.0			0.1			0.1	
Heard during the training regarding Family Planning		0.7			0.1			0.2	
Heard during the meetings of - [mother(s) group		0.7			0.0			0.1	
Other±	0.6		2.7	0.5		1.1	0.5		1.4
<b>Total (n)</b>	<b>176</b>	<b>149</b>	<b>256</b>	<b>643</b>	<b>708</b>	<b>1007</b>	<b>819</b>	<b>857</b>	<b>1263</b>

± Other includes: community meeting; office, women development training; children; school. Suaahara program staff; FPAN;

In 2015, radio was the most popular source cited for source of messages about injectables in the last six months, followed by FCHVs, health workers/health facility, friends/relatives television. This pattern is almost consistent in 2013. Information on injectables was received

more often from the radio and less often from the TV among respondents in the mountains compared to those in the hills.

Table 4.29 is a detailed table which shows the respondents who were exposed to any messages or information on injectables in the last six months, according to their background characteristics.

**Table 4.29 Percent distribution of currently married women aged 15-49 years who were exposed to any messages or information on injectable contraceptives in the last 6 months by selected background characteristics**

Characteristics	Yes			No			Total (n)			Total %
Region of residence	2011	2013	2015	2011	2013	2015	2011	2013	2015	
Mountain	57.7	45.2	71.1	42.3	54.8	28.9	305	330	360	100
Hill	58.7	54.9	79.9	41.3	45.1	20.1	1095	1290	1260	100
<b>Age of women (in years)</b>										
15 to 19	54.0	49.4	73.7	46.0	50.6	26.3	87	77	76	100
20 to 29	60.4	57.3	81.2	39.6	42.7	18.8	637	654	713	100
30 to 49	57.2	49.9	75.6	42.8	50.1	24.4	676	889	831	100
<b>Level of education</b>										
None	49.3	45.6	71.5	50.7	54.4	28.5	749	763	692	100
Primary	63.6	47.9	77.6	36.4	52.1	22.4	250	315	322	100
Secondary	69.7	59.2	84.1	30.3	40.8	15.9	234	238	345	100
SSLC or higher	76.6	71.4	87.4	23.4	28.6	12.6	167	304	261	100
<b>Religion</b>										
Hindu	52.9	53.7	77.8	47.1	46.3	22.2	1086	1431	1303	100
Others	78.0	47.1	78.5	22.0	52.9	21.5	314	189	317	100
<b>Caste ethnicity</b>										
Brahmin/ Chhetri	46.4	54.3	78.2	53.6	45.7	21.8	489	654	601	100
Janajati	71.6	49.5	80.1	28.4	50.5	19.9	612	499	680	100
Dalits	44.7	49.8	73.0	55.3	50.2	27.0	217	285	252	100
Newars	69.5	68.3	73.6	30.5	31.7	26.4	82	82	87	100
Madhesi caste		58.0			42.0			88		100
<b>Migration status</b>										
Migrant	64.1	53.9	78.7	35.9	46.1	21.3	217	258	235	100
Non Migrant	57.5	52.7	77.8	42.5	47.3	22.2	1183	1362	1385	100
<b>Exposure to TV and/or radio</b>										
None	35.3	36.0	65.2	64.7	64.0	34.8	507	716	290	100
Only one	67.2	64.2	77.4	32.8	35.8	22.6	579	681	541	100
Only two	79.9	72.6	83.0	20.1	27.4	17.0	314	223	789	100
<b>SES index</b>										
Poorest	33.5	57.1	75.7	66.5	42.9	24.3	316	324	321	100
Second	55.4	52.6	69.9	44.6	47.4	30.1	285	323	326	100
Third	62.0	45.0	73.8	38.0	55.0	26.2	271	320	325	100
Fourth	76.0	48.6	85.2	24.0	51.4	14.8	263	329	324	100
Richest	70.6	61.1	85.2	29.4	38.9	14.8	265	324	324	100
Total	58.5	52.9	78.0	41.5	47.1	22.0	1400	1620	1620	100

Those in hills were more likely than those in mountains to recall having received information on injectables in the last six months, and are consistent in all three surveys. Similarly, those aged 20-29 were more likely than older or younger to recall having received information on injectables in the last six months. With respect to media, the chances to recall having received

information on injectables in the last six months increases with the increase in the number of types of media sources, indicating the role of multiple mass media in making the media campaign interventions effective.

Similarly, migrants compared to non-migrants were more likely to recall having received information on injectables in the last six months. Level of education also was related with the recall of message where those with higher level of education were more likely to recall media message compared to those who had relatively lower level of education.

The result on recall of message on injection in last 6 month for religion, caste/ethnicity and SES do not show a clear pattern across three surveys.

More than half of respondents who said they'd heard or seen information about injectables in the prior six months mentioned two main messages: “*Ek patak lagaepachi tin mahina dhukka*” (No need to worry for three month after one injection) and “Sangini tin mahine sui” (sangini three month injection). No other message was mentioned by more than 10% of respondents (table 4.30).

**Table 4.30 Percent distribution of currently married women aged 15-49 years who have heard or seen any messages or information on injectable contraceptives in the last 6 months by what information they saw/heard and ecological regions**

Information seen/heard in last 6 months	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Sangini tin mahine sui (Sangini 3 month injection)	64.2	56.4	48.05	55.1	53.5	32.67	57.0	54.0	35.79
Ekpatak lagae pachi tin mahina dhukka (No need to worry up to three month after one injection)	77.8	60.4	82.42	66.3	67.5	86.10	68.7	66.3	85.35
Ma HunTapai Ki Sangini (TVC)			5.47			9.43			8.63
Prevents pregnancy	0.6	1.3		0.2	4.7		0.2	4.1	
Effective method			6.25			1.19			2.22
Depo	0.6			0.9			0.9		
If you have any complication consult the provider immediately	0.0			0.5			0.4		
<b>Total (n)</b>	<b>176</b>	<b>149</b>	<b>256</b>	<b>643</b>	<b>708</b>	<b>1007</b>	<b>819</b>	<b>857</b>	<b>1263</b>

### 4.3.2 AWARENESS OF BRANDS AND SOURCES OF SUPPLY AND OPINION ON METHOD

Table 4.31 shows that 86% of the total respondents spontaneously recalled the name Depo-Provera in 2015 compared 56 % of Sangini. Proportion recalling both Sangini and Depo-Provera in 2015 compared to 2011 has declined. Some of the respondents referred to injectables as ‘injection/3-month injection’, and some did not provide any name.

**Table 4.31 Percent distribution of currently married women aged 15-49 years by spontaneous knowledge of different brands of contraceptive methods and ecological regions**

Knowledge of different brands of injectables	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<i>Sangini</i>	62.0	37.6	38.6	61.9	54.3	60.8	61.9	50.9	55.9
Depo-Provera	58.0	53.3	73.1	63.9	53.6	89.4	62.6	53.6	85.7
Injection/ 3- months injection (Sui/ Tin Mahiney Sui)		3.9	26.9		8.4	10.6		7.5	14.3
Don't Know	20.3	20.3		15.3	13.5		16.4	14.9	
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

Table 4.32 presents the awareness regarding various sources of supply of injectable contraceptives. The source of injectables cited by most respondents was health post, followed distantly by government hospital/clinic and pharmacy. The same pattern is observed for both in mountains and hills. .

**Table 4.32 Percent distribution of currently married women aged 15-49 years by knowledge of sources of supply of injectable contraceptives and ecological regions**

Sources of supply of injectables	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Public sector</b>									
Govt. Hospital/Clinic	40.7	52.7	36.2	39.4	34.2	40.3	39.6	38.0	39.4
PHC Center	6.9	1.5	23.1	8.4	2.1	5.8	8.1	2.0	9.6
Health Post	59.0	69.4	83.3	58.6	72.9	77.0	58.7	72.2	78.4
Sub-Health Post	15.1	11.2	5.6	23.7	15.9	29.2	21.9	14.9	24.0
PHC Outreach	0.7	0.3	22.6	3.0	0.4	9.4	2.5	0.4	12.3
Mobile Clinic	0.3	0.9	0.6	-	3.2	0.2	0.1	2.7	0.2
FCHV	8.2	8.2	0.8	2.1	11.5	1.6	3.4	10.8	1.4
Other Govt.	-	0.0	2.2	0.1	0.1	0.0	0.1	0.1	0.5
<b>Non-Government (NGO) sector</b>		0.0			0.0			0.0	
FPAN	3.0	0.3	0.0	3.5	1.1	3.8	3.4	0.9	3.0
Marie Stopes	-	0.3	0.0	0.2	0.7	0.6	0.1	0.6	0.4
UMN	-		0.0	0.1		0.1	0.1		0.1
ADRA		0.0			0.1			0.1	
Nepal Red Cross		0.0			0.1			0.1	
Other NGO.	-	0.0		0.1	0.2		0.1	0.1	
<b>Private sector</b>		0.0			0.0			0.0	
Private Hospital/Clinic	35.4	10.3	10.3	23.6	16.5	24.9	26.1	15.2	21.7
Pharmacy	42.0	23.6	27.6	59.0	35.2	39.7	55.3	32.8	37.0
Sangini Outlet	3.3	0.0	1.1	4.6	0.7	11.9	4.3	0.6	9.5
Other Private	-	1.5	0.6	0.1	0.6	0.6	0.1	0.8	0.6
<b>Other sector</b>		0.0			0.0			0.0	
Shop	-	0.3	0.3	0.5	0.3	0.0	0.4	0.3	0.1
Friend/Relative	0.3	0.0	0.0	0.2	0.2	0.1	0.2	0.1	0.1
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

“Sangini outlet” was mentioned by less than 10 percent of respondents. Private hospital/clinic was mentioned by 26 % of the respondents in 2011 which declined to 21 % in 2015. There was minimal mention of any NGO sources.

**Table 4.33 Percent distribution of currently married women aged 15-49 years by knowledge of benefits and disadvantages of injectable contraceptives and ecological regions**

Perceived benefits of using injectable (Multiple answer)	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Effective method	48.2	16.1	47.2	28.8	13.4	37.5	33.0	14.0	39.6
Easy to use	36.7	27.6	42.5	35.6	26.4	41.4	35.9	26.6	41.7
Can be discontinued if desired to have another child	52.5	47.6	36.7	43.3	36.0	47.1	45.3	38.4	44.8
Less side effects	3.9	6.4	1.9	2.6	4.0	1.5	2.9	4.4	1.6
Long lasting	5.2	23.9	35.8	7	14.8	35.3	6.6	16.7	35.4
Prevents STIs/HIV infection		0.0	18.6		0.2	31.1		0.2	28.3
Do not need to take something all the time			0.6			1.3			1.1
No one will know about it									
Feels safe for 3 months		0.6			2.7			2.3	
Prevents pregnancy		2.1			7.1			6.0	
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>
<b>Opinion on disadvantage of using injectable (Multiple response)</b>									
Difficult to use	16.7	2.4	0.3	5.1	2.5	2.1	7.6	2.5	1.7
It has many side effects	40.7	39.4	63.9	54.2	45.3	82.9	51.2	44.1	78.7
It requires several visits to doctor	28.5	4.8	15.0	19.7	5.3	5.5	21.6	5.2	7.6
Difficult to get	1.3	0.6	0.0	0.6	0.5	0.2	0.8	0.6	0.1
Expensive	0.3	0.3	0.3	0.5	0.5	0.2	0.4	0.5	0.2
It causes infertility	11.8	11.2	7.5	1.6	8.4	19.8	3.8	9.0	17.0
Not accepted by husband	1	0.9	1.1	1.2	1.3	2.5	1.1	1.2	2.2
Not accepted by other family members	1.3	0.6	0.0	0.4	0.3	0.2	0.6	0.4	0.1
Not effective (becoming pregnant even used)		1.2	1.7		1.6	1.0		1.5	1.2
Does not prevent HIV/AIDS/STDs			0.6			2.9			2.3
Do not know how it works			1.4			0.5			0.7
It use is prohibited for religious reasons	-	0.0		0.1	0.1		0.1	0.1	
Body swells		0.6			0.5			0.6	
Excessive bleeding		10.9			12.7			12.3	
Irregular menstruation cycle		2.1			5.5			4.8	
Causes dizziness		2.1			4.8			4.3	
Weight gain		1.8			2.2			2.2	
Weight loss		0.9			1.2			1.1	
Menstruation stops		0.0			1.6			1.2	
Causes body ache		0.9			0.1			0.2	
Cause stomach ache		0.0			1.3			1.0	
Causes skin infections		0.0			0.2			0.1	
Causes headache		0.0			0.2			0.1	
Causes weakness/ hands-legs feel weak		0.6			0.2			0.2	
Might cause infection in the uterus		0.0			0.2			0.1	
Causes white water discharge		0.0			0.1			0.1	
Not granted	1.6			0.4			0.6		
Don't know	26.2	37.0	30.8	31.0	28.5	9.0	29.9	30.2	13.8
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

Table 4.34 provides information on the perceived advantages and disadvantages of using injectable contraceptives. The advantage mentioned most often (in all three surveys as well as in mountains and hills) for injectables was ‘it can be discontinued if they desired to have

another child’, followed by ‘easy to use’ and ‘effective method’. About one-fifth of total respondent did not know a benefit of using injectables.

For 2013 and 2015, the following table shows differences on perceived benefits and disadvantages for injectables for current users, former users and aware non-users. For all three groups, the benefit cited by the most respondents was “can be discontinued”, followed by “easy to use”, which was much higher for current and former users than never users. Never users were more likely not to be able to provide any benefit, indicating while they know of injectables, they did not know much about it. The main disadvantage cited by each of the three group is “many side effects”.

**Table 4.34 Percent distribution of currently married women aged 15-49 years by knowledge of benefits and disadvantages of injectable contraceptives, by user status and ecological regions**

Perceived benefits of using injectables 2013 only	Current users		Former users		Aware never users		Total	
	2013	2015	2013	2015	2013	2015	2013	2015
Effective method	16.8	39.6	13.6	40.2	10.0	38.8	14.1	39.6
Easy to use	31.4	46.0	26.2	36.9	19.3	39.1	26.8	41.7
Can be discontinued if desired to have another child	40.3	48.3	39.8	42.6	35.6	39.9	38.9	44.8
Less side effects	6.5	1.9	3.2	1.4	2.1	1.2	4.5	1.6
Long lasting	19.5	30.9	14.6	40.0	14.4	38.8	16.9	35.4
Do not need to take something all the time		27.8		30.5		26.3		28.3
No one will know about it		1.0		1.6		0.6		1.1
Feels safe for 3 months	2.2		3.7		1.2		2.3	
Prevents pregnancy	7.6		5.4		4.2		6.1	
DK	12.6	3.5	13.8	4.1	31.9	8.0	18.1	4.6
<b>Total (n)</b>	<b>764</b>	<b>770</b>	<b>405</b>	<b>512</b>	<b>430</b>	<b>338</b>	<b>1599</b>	<b>1620</b>
<b>Perceived disadvantages of using injectables</b>								
Difficult to use	3.3	1.3	2.2	2.5	1.4	1.2	2.5	1.7
It has many side effects	42.5	79.0	49.1	82.8	43.5	71.9	44.5	78.7
It requires several visits to doctor	6.3	7.1	4.7	7.6	4.2	8.6	5.3	7.6
Difficult to get		0.3		0.0		0.0		0.1
Expensive		0.0		0.4		0.3		0.2
It causes infertility	10.1	17.3	7.9	19.7	8.4	12.4	9.1	17.0
Not accepted by husband	1.2	2.3	1.2	2.1	1.4	2.1	1.3	2.2
Not accepted by other family members		0.1		0.0		0.3		0.1
Not effective (becoming pregnant even used)	1.0	1.0	3.0	1.6	0.9	0.9	1.5	1.2
Does not prevent HIV/AIDS/STDs		2.3		3.1		1.2		2.3
Do not know how it works		0.4		0.4		1.8		0.7
Excessive bleeding	13.1		13.6		10.2		12.4	
Irregular menstruation cycle	5.8		6.9		1.2		4.8	
Causes dizziness	5.0		4.7		2.8		4.3	
Weight gain	2.4		3.0		1.2		2.2	
Weight loss	0.9		2.0		0.7		1.1	
Menstruation stops	1.8		1.2		0.2		1.3	
Causes stomach ache	1.0		1.7		0.5		1.1	
DK	28.3		19.3		41.9		29.6	
<b>Total (n)</b>	<b>764</b>	<b>770</b>	<b>405</b>	<b>512</b>	<b>430</b>	<b>338</b>	<b>1599</b>	<b>1620</b>

(data for 2011 was not collected)

### 4.3.3 USE OF INJECTABLES

Table 4.35 shows the source of supply of injectable contraceptives used by the respondents. Over half of injectable users said they got their last injectable from health post/sub-health post. In private sector, 21 % in 2011 and 17 % in 2015 said pharmacy as the source of supply of injectable contraceptives used by them. Other responses were very low.

**Table 4.35 Percent distribution of currently married women aged 15-49 years using injectable contraceptives at the time of survey by source of their supply last time and ecological regions**

Place from where injectable was obtained last time	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Health post/sub-health post</b>	<b>87.3</b>	<b>69.8</b>	48.2	<b>70.6</b>	<b>79.9</b>	<b>55.5</b>	<b>74.5</b>	<b>77.3</b>	<b>53.5</b>
Health Post		39.7	41.1		58.8	45.2		53.8	44.1
Sub-health post		30.1	7.1		21.1	10.3		23.5	9.4
Primary health care center			3.6			0.7			1.5
Hospital	1.8	17.8	1.8	8.9	4.4	3.4	7.2	7.9	3.0
Private Clinic/ Nursing Home	1.8	2.7	0.0	1.7	0.5	8.2	1.7	1.1	5.9
Private Pharmacy	5.5	8.2	7.1	14.4	13.2	21.2	12.3	11.9	17.3
Mobile camp/ Outreach clinic	3.6	0.0	39.3	2.8	2.0	11.0	3.0	1.4	18.8
Others/Don't know	-	1.4		1.7	0.0		1.3	0.4	
<b>Total (n)</b>	<b>55</b>	<b>73</b>	<b>56</b>	<b>180</b>	<b>204</b>	<b>146</b>	<b>235</b>	<b>277</b>	<b>202</b>

Note: The 2011 data lumped health post and sub-health post together because this was the way it was collected.

Table 4.36 presents the brand of injectable last used. Depo-Provera was mentioned most often (66 % and over, in all three surveys as well as in mountains and hills) followed by Sangini, the CRS brand. Similarly, the great majority (86 % in 2011 and 77 % in 2015) of injectable users said they received the injectable free of cost last time. Among the paying users, the price ranged from NRs 30-60 with a median of 48 in 2011 and ranged from NRs 30-110 with a median of 50 in 2015.

**Table 4.36 Percent distribution of currently married women aged 15-49 years using injectable contraceptives at the time of survey by brand used last time including its cost and ecological regions**

Brand of injectable received last time	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Sangini	7.3	31.5	7.1	16.7	22.1	29.5	14.5	24.5	23.3
Depo-Provera	92.7	63.1	76.8	81.7	67.1	69.9	84.3	66.0	71.8
3 months injection (tin mahiney sui)		4.1			8.8			7.6	
Don't know	-	1.4	16.1	1.7	2	0.7	1.3	1.8	5.0
<b>Total</b>	<b>55</b>	<b>73</b>	<b>56</b>	<b>180</b>	<b>204</b>	<b>146</b>	<b>235</b>	<b>277</b>	<b>202</b>
Amount paid injectable last time (Nrs)									
30	-	0	0.0	1.1	0.5	0.7	0.9	0.4	0.5
35	-	0	0.0	0.6	2.0	0.7	0.4	1.4	0.5
40	1.8	0	0.0	0.6	2.0	0.7	0.9	1.4	0.5
45	1.8	1.4	0.0	5.6	9.8	2.7	4.7	7.6	2.0
50	1.8	9.6	7.1	7.8	2.5	21.9	6.4	4.3	17.8
55			0.0			0.7			0.5
60	1.8	0.0	0.0	-	0.5	0.7	0.4	0.4	0.5
75		1.4			0.0			0.4	
80		0.0			0.5			0.4	
110			0.0			0.7			0.5
150			0.0			0.7			0.5
Free of cost	92.7	86.3	92.9	83.3	81.9	70.5	85.5	83.0	76.7
DK		1.4		1.1	0.5		0.9	0.7	
Median	48	50	50	48	45.0	50	48	45	50
Std. Deviation	6	6	6	6	6	6	6	6	6
Range	40-60	45-50	50 - 50	30-50	30-80	30 - 110	30-60	30-80	30-110
<b>Total (n)</b>	<b>55</b>	<b>73</b>	<b>56</b>	<b>180</b>	<b>204</b>	<b>146</b>	<b>235</b>	<b>277</b>	<b>202</b>

Table 4.37 includes information regarding the level of satisfaction and reasons for satisfaction or dissatisfaction. In 2011, 69% of current injectable users were very satisfied with it. This increased to 70 % in 2015. Similarly, 26 % in 2011 said they were somewhat satisfied which decreased to 23 % in 2015. Less than 12 % of the current injectable users said they were dissatisfied with it.

The three most cited reasons for being satisfied (very and somewhat) were effective, easy to take, and no side effects. The most cited reasons by dissatisfied or somewhat satisfied users was ‘side effects’ in 2011 and 2013, as there were no dissatisfied users in 2015.

**Table 4.37 Percent distribution of currently married women aged 15-49 currently using injectable contraceptive by level of satisfaction, reasons for satisfaction or dissatisfaction and ecological regions**

Descriptions	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Level of satisfaction with injectable</b>									
Very	83.6	75.3	76.8	63.9	53.9	67.8	68.5	59.6	70.3
Somewhat	14.5	16.4	16.1	28.9	32.8	26.0	25.5	28.5	23.3
Not	1.8	8.2	7.1	7.2	13.2	6.2	6.0	11.9	6.4
<b>Total (%)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Total (n)</b>	<b>55</b>	<b>73</b>	<b>56</b>	<b>180</b>	<b>204</b>	<b>146</b>	<b>235</b>	<b>277</b>	<b>202</b>
<b>Reasons for satisfaction, among satisfied and somewhat satisfied respondents</b>									
Effective	90.7	43.3	84.6	77.8	39.4	73.0	81.0	40.5	76.2
No side effects	57.4	23.9	44.2	38.3	37.1	29.2	43.0	33.5	33.3
Easy to take	53.7	43.3	76.9	61.7	34.9	75.9	59.7	37.2	76.2
Inexpensive	14.8	9.0	5.8	6.0	10.3	8.8	8.1	9.9	7.9
Side effects			1.9			2.9			2.6
Works for long period		1.5	9.6		2.3	4.4		2.1	5.8
Service center near		32.8			25.1			27.3	
It is safe for 3 months	0.0	0.0		3.6	4.6		2.7	3.3	
<b>Total (satisfied and somewhat satisfied)</b>	<b>100.0</b>	<b>100.0</b>		<b>100.0</b>	<b>100.0</b>		<b>100.0</b>	<b>100.0</b>	
<b>Total (n)</b>	<b>54</b>	<b>67</b>	<b>52</b>	<b>167</b>	<b>175</b>	<b>137</b>	<b>221</b>	<b>242</b>	<b>189</b>
<b>Reasons for dissatisfaction among not-satisfied and somewhat satisfied respondents</b>									
Ineffective	11.1	5.6	0.0	4.6	12.0	0.0	5.4	10.9	0.0
Side effects	11.1	50.0	0.0	16.9	45.7	0.0	16.2	46.4	0.0
Difficult to use	0.0	0.0	0.0	1.5	2.2	0.0	1.4	1.8	0.0
Service center too far	0.0	0.0	0.0	6.2	7.6	0.0	5.4	6.4	0.0
Causes dizziness	0	0.0	0.0	0	6.5	0.0	0	5.5	0.0
Excessive bleeding		0.0	0.0		9.8	0.0		8.2	0.0
Causes irregular menstruation cycle		0.0	0.0		2.2	0.0		1.8	0.0
<b>Total (not-satisfied and somewhat satisfied)</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Total (n)</b>	<b>9</b>	<b>18</b>	<b>52</b>	<b>65</b>	<b>92</b>	<b>137</b>	<b>74</b>	<b>110</b>	<b>189</b>

When asked for what reasons they decided to use this method rather than others, the most frequent responses among current users were (not in ranked order), ‘confirm for three months’ very effective to prevent pregnancy and easy to use. Other cited reasons (not in ranked order) were ‘recommended by husband’ ‘very effective’ and ‘desire for no more children’ (Table 4.38).

**Table 4.38 Percent distribution of currently married women aged 15-49 years using injectable contraceptive by reason for using this method**

Reasons for deciding to use injectable	Reasons (Multiple answer)		
	2011	2013	2015
Very effective to prevent pregnancy	78.3	23.8	44.1
Safe/few side effects	37.4	12.3	19.3
Easy to use	63.4	48.4	48.0
Disliked other methods	8.1	11.2	10.4
Recommended by service provider	6.4	4.3	5.4
Recommended by friends/relatives	4.7	12.6	4.5
Recommended by husband	21.3	42.2	8.9
Don't know about other method	2.6	2.5	0.5
Permanent , long lasting	3.0	2.9	4.5
Confirm for 3 months		63.9	63.4
Desire for no more children		23.1	17.8
Reliable method		11.2	
Can get it free of cost		0.4	
Other (other methods not effective; easy to use and can get freely; no hurdle in using; lack of time)	0.4		
<b>Total n</b>	<b>235</b>	<b>277</b>	<b>202</b>

Virtually all (97% and over) current injectable users said that their husband was in favor of using injectable (Table 4.39).

**Table 4.39 Percent distribution of husband in favor or opposed to the idea of using the method currently using by ecological regions**

Response	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
In favor	100.0	96.1	98.7	96.2	97.2	98.7	97.0	97.0	98.7
Opposed	0.0	3.9	0.7	1.4	1.5	0.3	1.1	2.0	0.4
Neutral	0.0	0.0	0.7	2.3	0.5	1.0	1.8	0.4	0.9
Do Not Know	0.0	0.0	100.0	0.0	0.8	100.0	0.0	0.7	100.0
Total %	100.0	100.0	56	100.0	100.0	146	100.0	100.0	202
<b>Total current users</b>	<b>148</b>	<b>152</b>	<b>56</b>	<b>555</b>	<b>614</b>	<b>618</b>	<b>703</b>	<b>766</b>	<b>770</b>

#### 4.3.4 FUTURE USE INTENTION AND WILLINGNESS TO PAY

A total of 406, 483 and 202 respondents in 2011, 2013 and 2015 indicated that they would consider using injectables in the future. Table 4.40 provides information regarding what these respondents say they would be willing to pay for the injectable contraceptive in the future.

Among those intending to use injectables, 98 % in 2011, 76% in 2013 and 44 % in 2015 said that they were willing to buy a dose of injectable at a price of Rs. 45.

In 2011 and 2013, the median price the respondents were willing to pay for injectable was NRs 50, which increased to NRs 80, in 2015. This means that half of the respondents were willing to pay NRs 50 in 2011 and 2013 whereas the same percentage of respondents were willing to

pay NRS 80 in 2015. Note that 85% in 2011, 83 % in 2013, and 77 % in 2015 of current users said they obtained the injectable free of cost.

**Table 4.40 Percent distribution of currently married women aged 15-49 years who intend to use injectable contraceptives in the future by willingness to pay for injectable contraceptives and ecological regions**

Willing to buy a dose of injectable at a price of Rs. 45.	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Yes	99.2	79.7	44.6	96.7	74.5	43.8	97.5	76.0	44.1
No	0.8	18.8	19.6	2.6	22.9	26.7	2.0	21.7	24.8
Don't know	-	1.4	35.7	0.7	2.6	29.5	0.5	2.3	31.2
<b>Total (n)</b>	<b>133</b>	<b>138</b>	<b>56</b>	<b>273</b>	<b>345</b>	<b>146</b>	<b>406</b>	<b>483</b>	<b>202</b>
<b>Maximum price willing to pay for A dose of injectable (NRs)</b>									
Less than 50	8.3	34.1	5.4	2.6	30.1	6.8	4.4	31.3	6.4
50 thru 59	76.7	36.2	1.8	70.0	27.2	17.8	72.2	29.8	13.4
60 or more	14.3	21.0	55.4	17.6	29.6	45.9	16.5	27.1	48.5
Don't know	0.8	8.7	37.5	9.9	13.0	29.5	6.9	11.8	31.7
Mean	52.3	55.4	76.4	52.9	57.3	74.6	52.7	56.7	75.0
Median	50	50	80	50	50	80	50	50	80
Std. Deviation	7.0	35.5	18.3	7.5	28.2	23.0	7.3	30.5	21.9
Range	45-90	5.0-300	30-100	30-100	5.0-200	30-100	30-100	5-300	30-100
<b>Total (n)</b>	<b>133</b>	<b>138</b>	<b>56</b>	<b>273</b>	<b>345</b>	<b>146</b>	<b>406</b>	<b>483</b>	<b>202</b>

## 4.4 CONDOMS

### 4.4.1 EXPOSURE TO MESSAGES IN THE LAST 6 MONTHS

The percentage of respondents hearing or seeing some information about condoms has increased from 52% in 2011 to 74% in 2015. This increase was also observed in both mountains and hills.

In all three surveys, the most popular source for messages or information about condoms in the last six months was radio. For other sources, the pattern of popularity is not same across surveys. However, one can see from the table that other four sources of information about condoms were (not on rank order) FCHV, friends/relatives, neighbors, health workers/health facility, and TV (Table 4.41).

**Table 4.41 Percent distribution of currently married women aged 15-49 years by sources of information on condoms in the last 6 months and ecological regions**

Exposure to any message or information from any source about condoms over the last 6 months	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Yes	47.5	38.8	60.3	53.6	50.6	77.5	52.3	48.2	73.7
No	52.5	57.9	39.7	43.8	46.8	22.5	45.7	49.1	26.3
Don't know	-	3.3	3.6	2.6	2.6	1.0	2.0	2.7	1.5
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>
<b>Source of information on condom in the last 6 months (Multiple answers)</b>									
Radio	42.8	64.1	51.6	63.0	48.5	67.1	59.0	51.1	64.3
Television	3.4	7.8	9.7	14.8	28.9	36.2	12.6	25.5	31.4
Newspaper/magazine/broacher	3.4	1.6	0.9	1.9	4.4	2.0	2.2	4.0	1.8
Poster/Hoarding Board	6.2	3.1	9.7	6.5	6.6	7.1	6.4	6.0	7.5
Street dramas		0.0	0.0		0.3	0.2		0.3	0.2
In a shop	2.8	2.3	0.0	8.5	4.6	0.4	7.4	4.2	0.3
Husband	-		11.1	2.2		9.6	1.8		9.9
Friends/Relatives	62.8	13.3	33.6	43.8	19.4	33.3	47.5	18.4	33.3
Neighbor	30.3	7.8	15.7	19.6	12.1	17.1	21.7	11.4	16.8
FCHV	21.4	38.3	38.7	14.7	42.0	48.1	16.0	41.4	46.4
Health workers/Health facility	6.9	27.3	45.6	14.8	28.3	29.4	13.3	28.2	32.3
Heard during the training regarding Family Planning		0.8			0.0			0.1	
Heard during the meetings of - Aama Samuha [mother(s) group]		0.8	3.2		0.0	1.6		0.1	1.9
Cinema hall/Theater		0.0	0.0		0.2	0.1		0.1	0.1
Other±	1.4			0.5			0.7		
Do not know/ do not remember	-		0.5	0.2		0.0	0.1		0.1
<b>Total (n)</b>	<b>145</b>	<b>128</b>	<b>217</b>	<b>587</b>	<b>653</b>	<b>977</b>	<b>732</b>	<b>781</b>	<b>1194</b>

± Other includes: community meeting; office, women development training.

Table 4.42 shows the respondents who received information about condoms in the last six months by background characteristics. In all three surveys, higher numbers of respondents in the hill received information in the last six months than respondents in the mountains.

Exposure to information on condoms in the last six months was lowest among those who were in between 30-49 years of age compared to those who were younger. Level of education had a direct relationship with information received on condoms in the last six months. The proportion who received information increased with increase in their level of education. Likewise, those who never listened to radio nor watched TV had the lowest changes to receive recent information on condoms compared to those who watched either one or both. This confirms the role of TV and radio in disseminating condom related information to the beneficiaries.

No clear pattern of relation between information received on condoms with caste/ethnicity, religion and SES is observed in this study. However, respondents in the highest than lowest wealth quintile and migrant than non-migrant were most likely to have received recent

information on condoms. However, those in the middle (third) quintile were less likely than any other quintile to have received recent information regarding condoms.

**Table 4.42 Percent distribution of currently married women aged 15-49 years that received any information on condoms in the last 6 months by their selected background characteristics**

Region of residence	Yes			No			DK			Total %	Total (n)		
	2011	2013	2015	2011	2013	2015	2011	2013	2015		2011	2013	2015
Mountain	47.5	38.8	60.3	52.5	57.9	36.1	0.0	3.3	3.6	100.0	305	330	360
Hill	53.6	50.6	77.5	43.8	46.8	21.5	2.6	2.6	1.0	100.0	1095	1290	1260
<b>Age of women (in years)</b>													
15 - 19	55.2	58.4	75.0	42.5	40.3	23.7	2.3	1.3	1.3	100.0	87	77	76
20 - 29	54.0	55.8	77.6	43.8	41.1	22.3	2.2	3.1	0.1	100.0	637	654	713
30 - 49	50.3	41.7	70.3	47.9	55.7	27.0	1.8	2.6	2.8	100.0	676	889	831
<b>Level of education</b>													
None	40.3	35.6	65.2	57.5	61.3	31.4	2.1	3.0	3.5	100.0	749	763	692
Primary	60.0	44.1	73.9	38.8	52.1	25.8	1.2	3.8	0.3	100.0	250	315	322
Secondary	68.4	58.4	81.4	28.2	39.1	18.6	3.4	2.5	0.0	100.0	234	238	345
SSLC or higher	71.9	76.0	85.8	27.5	23.0	14.2	0.6	1.0	0.0	100.0	167	304	261
<b>Religion</b>													
Hindu	46.7	49.3	74.4	50.8	48.2	24.9	2.5	2.5	0.7	100.0	1086	1431	1303
Others	71.7	40.2	71.0	28.0	55.6	24.0	0.3	4.2	5.0	100.0	314	189	317
<b>Caste ethnicity</b>													
Brahmin Chhetri	43.4	51.5	75.0	53.6	46.5	25.0	3.1	2.0	0.0	100.0	489	654	601
Janajati	67.3	41.9	76.0	31.7	53.5	21.5	1.0	4.6	2.5	100.0	612	499	680
Dalits	34.1	47.0	67.9	62.7	50.9	29.8	3.2	2.1	2.4	100.0	217	285	252
Newars	41.5	58.5	63.2	58.5	39.0	34.5	0.0	2.4	2.3	100.0	82	82	87
Madhesi caste		53.4			46.6			0.0		100.0		88	
<b>Migration status</b>													
Migrant	58.5	51.2	77.9	40.1	46.1	21.3	1.4	2.7	0.9	100.0	217	258	235
Non Migrant	51.1	47.7	73.0	46.7	49.6	25.3	2.1	2.7	1.7	100.0	1183	1362	1385
<b>Exposure to TV and/or radio</b>													
None	24.9	28.4	57.9	72.2	67.2	38.3	3.0	4.5	3.8	100.0	507	716	290
Only one	64.2	61.2	73.2	34.0	37.2	25.5	1.7	1.6	1.3	100.0	579	681	541
Both	74.5	72.2	79.8	24.5	27.4	19.3	1.0	0.4	0.9	100.0	314	223	789
<b>SES index</b>													
Poorest	30.1	49.1	64.2	64.9	49.1	31.5	5.1	1.9	4.4	100.0	316	324	321
Second	45.3	45.5	67.8	53.7	51.1	30.1	1.1	3.4	2.1	100.0	285	323	326
Third	52.8	39.4	69.2	45.4	57.8	30.8	1.8	2.8	0.0	100.0	271	320	325
Fourth	68.4	47.1	84.0	31.2	48.0	15.4	0.4	4.9	0.6	100.0	263	329	324
Richest	69.8	59.9	83.3	29.1	39.5	16.0	1.1	0.6	0.6	100.0	265	324	324
<b>Total</b>	52.3	48.2	73.7	45.7	49.1	24.8	2.0	2.7	1.5	100.0	1400	1620	1620

Table 4.43 provides messages in the past six months respondents recalled. The one message most frequently recalled in 2013 was "use of condom can prevent from disease or STI or HIV" (60%). However, one message most frequently recalled in 2011 and 2015 was "Surachit ra bhar-pardo [Safe and reliable]" (65 and 85 % respectively). Other messages recalled in different surveys do not follow similar pattern. Other popular message recalled was "it is a spacing method". Eleven percent in 2015 and 23 % in 2011 did not recall any message.

**Table 4.43 Percentage of respondents by messages seen or heard about condoms in the last 6 months, among those who recalled any information on condoms**

Messages seen or heard	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Samipayata Badcha Taba Panther Chaincha [When you get close, get Panther]	22.1	2.3	0.9	6.1	5.5	4.0	9.3	5.0	3.43
Surachit ra bhar-pardo [Safe and reliable]	70.3	26.6	78.3	63.2	22.4	86.6	64.6	23.1	85.1
It is a spacing method	0.0	19.5	13.4	4.1	29.1	4.9	3.3	27.5	6.5
Panther Premium Condom for Pleasure and Protection			0.9			0.3			0.4
D'zire Dotted Condom- Make Each Moment Memorable (In radio and print)			1.4			0.0			0.3
It is used for safe sex		0.0			1.5			1.3	
Do not re-use a condom	0.0	0.0		0.5	0.5		0.4	0.4	
Use of condom can prevent from disease or STI or HIV	10.3	55.5		11.9	60.3		11.6	59.5	
Don't know	11.0	18.0	13.4	26.1	14.9	10.6	23.1	15.4	11.1
<b>Total (n)</b>	<b>145</b>	<b>128</b>	<b>217</b>	<b>587</b>	<b>653</b>	<b>977</b>	<b>732</b>	<b>781</b>	<b>1194</b>

#### 4.4.2 AWARENESS OF BRANDS AND SOURCES OF SUPPLY AND OPINION ON METHOD

Table 4.44 shows that, among various condom brands, 13 % were aware of Dhaal in 2011 increased to 74% in 2015. This was followed by Panther increased from 13 % to 16%. Awareness for both brands in 2013 and 2015 was higher in the hills than in mountains. Less than 5% of respondents mentioned other brands. 75 % in 2011, 43 % in 2013 and 46 % in 2015 in mountains did not cited any condom brand name or said they didn't know as against 76 % in 2011, 35 % in 2013 and 17 % in 2015 in the hills.

**Table 4.44: Percentage of respondents by knowledge about different brands of condoms**

Condom brand the respondents know	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Panther	17.7	9.4	6.1	12.1	17.1	19.2	13.4	15.5	16.3
Dhaal	10.5	41.5	49.7	13.1	58.3	80.9	12.5	54.9	74.0
Number 1	9.2	4.2		3.7	4.75		4.9	4.6	
D'zire			0.6			1.0			0.9
Jodi	2.6	0.0	0.3	1.7	0.2	1.0	1.9	0.2	0.9
Cobra		0.0	0.3		0.1	0.4		0.1	0.4
Fire Xtacy			0.0			0.1			0.1
Wild Cat Dotted			0.0			0.1			0.1
Josh		0.0			0.1			0.1	
Maksey	0.3			0.0				0.1	
Kamasutra		0.0			0.1			0.1	
Don't know	74.8	43.3	46.1	77.5	34.5	17.4	76.9	36.3	23.8
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

In 2013 and 2015, the place where to get condoms cited by most respondents was health post, followed by pharmacy which was the other way around in 2011. Other popular sources (not in rank order) were, FCHV, government hospital/clinic, private hospital/clinic and sub-health

post. Respondents who did not know or remember a source of supply for condoms in 2011 was 14 % which increased to 19 % in 2013 and declined to 2 % in 2015 (table 4.45).

**Table 4.45 Percent distribution of currently married women aged 15-49 years by knowledge about the sources of supply of condoms and ecological regions**

Sources	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Public sector</b>									
Govt. Hospital/Clinic	20.7	35.5	18.6	26.7	21.3	30.6	25.4	24.2	28.0
PHC Center	4.6	1.8	17.5	4.1	2.2	5.9	4.2	2.2	8.5
Health Post	39.0	49.1	68.3	43.9	53.0	70.9	42.9	52.2	70.3
Sub-Health Post	11.8	7.9	11.1	14.8	10.3	28.2	14.1	9.8	24.4
PHC Outreach	0.3	0.0	15.3	1.5	0.5	4.8	1.2	0.4	7.2
Mobile Clinic	-	0.9	0.3	0.5	1.8	0.4	0.4	1.6	0.4
FCHV	25.9	27.9	38.3	22.2	22.9	53.6	23.0	23.9	50.2
Other Government	-			0.3			0.2		
<b>Non-Government (NGO) sector</b>									
FPAN	2.0	0.6	0.0	2.1	1.2	3.9	2.1	1.0	3.0
Marie Stopes	-	0.6	0.0	0.1	0.7	0.6	0.1	0.7	0.5
Nepal Red Cross		0.0	0.0		0.2	0.1		0.1	0.1
Other NGO.		0.0	0.0		0.2	0.2		0.1	0.1
<b>Private sector</b>									
Private Hospital/Clinic	28.5	8.5	7.8	13.3	13.3	18.6	16.6	12.3	16.2
Pharmacy	49.5	25.8	46.4	59.9	42.6	50.7	57.6	39.1	49.8
<i>Sangini</i> Outlet	0.3	0.3	0.6	0.9	0.2	4.2	0.8	0.2	3.4
Other Private		1.2	0.0		0.9	0.2		1.0	0.2
<b>Other sector</b>									
Shop	0.3	0.9	3.6	10.8	1.8	1.4	8.5	1.6	1.9
Friend/Relative	0.7	0.0	0.3	0.3	0.1	0.4	0.4	0.1	0.4
Do not know/ do not remember	26.2	22.4	5.8	10.8	17.5	1.4	14.1	18.5	2.4
<b>Total (n)</b>	<b>305</b>	<b>330</b>	360	<b>1095</b>	<b>1290</b>	1260	<b>1400</b>	<b>1620</b>	1620

Table 4.46 provides information on the perceived advantages and disadvantages of using condoms. The advantage to using condoms cited by most in all three surveys was ‘it prevents STIs/HIV infection’. Other important reasons (not in rank orders) were ‘can be discontinued if desired to have another child’, ‘condoms are easy to use’, and have less side-effects. The percentage of respondents not knowing any benefits of using condoms was quite high (68% in 2011 declined to 56 % in 2013 and again declined to 27 % in 2015).

The disadvantage cited by most in 2013 and 2015 was ‘the fear of condom bursting or tearing’ as against “It has many side effects” in 2011. This was followed very distantly (not in rank order) by ‘not effective/becoming pregnant even when used’ and ‘difficult to use’. Over half of respondents who didn’t know any disadvantage of condoms declined to 27 % in 2015.

**Table 4.46 Percent distribution of currently married women aged 15-49 years by knowledge about the benefits and disadvantages of using condoms and ecological regions**

Perceived benefits of using condoms (Multiple response)	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Effective method	20.7	3.9	31.4	20.2	3.3	26.7	20.3	3.4	27.8
Easy to use	19.7	14.5	16.4	16.6	9.6	29.8	17.3	10.6	26.8
Can be discontinued if desired to have another child	20.7	16.1	3.3	10.1	10.2	12.6	12.4	11.4	10.6
Less side effects	1.6	6.7	14.2	4.2	6.0	18.3	3.6	6.1	17.3
Prevents STIs/HIV infection	49.2	30.0	32.5	50.2	40.3	49.3	50.0	38.2	45.6
Long lasting		1.5			0.7			0.9	
Feels safe for 3 months		0.0			0.1			0.1	
Prevents pregnancy		0.3			0.9			0.7	
DK	30.8	44.2	24.2	26.3	34.9	9.9	27.3	36.8	13.1
<b>Total (n)</b>	<b>305</b>	<b>330</b>		<b>1095</b>	<b>1290</b>		<b>1400</b>	<b>1620</b>	
<b>Perceived disadvantages of using condoms (Multiple response)</b>									
Difficult to use	9.2	3.3	8.3	7.0	5.7	5.6	7.5	5.2	6.2
It has many side effects	19.3	1.8	1.9	11.5	2.0	5.8	13.2	2.0	4.9
It requires several visits to doctor	1.0	0.0	0.0	0.2	0.9	1.0	0.4	0.7	0.8
Difficult to get	2.3	0.0	0.0	0.5	0.5	0.2	0.9	0.4	0.2
Expensive	1.0	0.0	0.0	0.1	0.3	0.2	0.3	0.2	0.2
It causes infertility	1.0	0.0	0.0	1.2	0.6	0.4	1.1	0.5	0.3
Not accepted by husband	10.2	1.5	0.0	2.3	0.6	2.1	4.0	0.8	1.7
Not accepted by other family members	-	0.3	0.3	0.1	0.3	0.2	0.1	0.3	0.2
Fear of bursting or tearing [Condom]	3.6	31.5	46.9	7.9	34.1	70.8	6.9	33.6	65.5
Not effective (becoming pregnant even used)		1.5	3.1		6.9	2.5		5.8	2.6
Do not know how it works			0.3			0.4			0.4
Fear of getting stuck in the vagina; fear of slippage			0.8			0.7			0.7
Other (no satisfaction from its use)			0.3			0.2			0.2
Not granted	3.9			1.5			2.0		
It use prohibited for religious reasons		0.0			0.2			0.1	
Excessive bleeding		0.0			0.2			0.2	
Irregular menstruation cycle		0.0			0.2			0.1	
Causes dizziness		0.0			0.4			0.3	
Weight gain		0.0			0.2			0.1	
Menstruation stops		0.0			0.1			0.1	
Cause stomach ache		0.0			0.2			0.1	
Do not know how to use a condom properly		0.9			0.3			0.4	
Causes skin infections		0.0			0.2			0.2	
Condom does not give satisfaction		0.0			0.3			0.2	
Might cause infection in the uterus		0.0			0.2			0.1	
DK	59.7	63.0	47.2	70.5	54.2	21.1	68.1	56.0	26.9
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

In all three surveys, great majority (80% and over) of the current condom users were very satisfied with the method. Similarly, another 15 % or over were somewhat satisfied. Only less than 2% in 2013 survey said that they were not satisfied. The three reasons cited by most respondents for why they were satisfied were lack of side effects, effectiveness and easy to use.

**Table 4.47 Percent distribution of currently married women aged 15-49 years who are currently using condom by their levels of satisfaction, and reasons for satisfaction and ecological regions**

Level of satisfaction	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Very	100.0	60.0	100.0	84.6	84.3	81.4	85.4	80.3	83.7
Somewhat	0.0	30.0	0.0	15.4	15.7	18.6	14.6	18.0	16.3
Not satisfied	0.0	10.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
Total %	100	100	100	100	100	100	100	100	100
Total (n) (condom users)	2	10	6	39	51	43	41	61	49
<b>Reason for satisfaction</b>									
Effective	100.0	22.2	83.3	69.2	58.8	81.4	70.7	53.3	81.6
No side effects	100.0	88.9	50.0	76.9	64.7	83.7	78.0	68.3	79.6
Easy to use	50.0	77.8	66.7	35.9	39.2	34.9	36.6	45.0	38.8
Inexpensive	0.0	22.2	33.3	10.3	9.8	14.0	9.8	11.7	16.3
Service center near	0.0	0.0		0.0	3.9		0.0	3.3	
Works for long period	0.0	0.0		0.0	5.9		0.0	5.0	
No more desire for children	0.0	0.0		7.7	0.0		7.3	0.0	
<b>Total (n)</b>	<b>2</b>	<b>10</b>	<b>6</b>	<b>39</b>	<b>51</b>	<b>43</b>	<b>41</b>	<b>61</b>	<b>49</b>

Note: Reasons for dissatisfaction not analyzed due to small sample size.

When asked why they decided to use condoms currently rather than another method, the response given most often was side effects in 2011 and 2015 followed by easy to use, while in 2013 it was recommended by husband. Other responses (not in rank orders) were effective, and disliked other methods.

**Table 4.48 Percent distribution of currently married women aged 15-49 years who are currently using condoms by reasons for choosing it and ecological regions**

Reason for choosing this particular method	Reasons (Multiple answer)								
	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Very effective to prevent pregnancy	100.0	40.0	50.0	74.4	45.1	39.5	75.6	44.3	40.8
Safe/few side effects	50.0	20.0	66.7	53.8	23.5	69.8	53.7	23.0	69.4
Easy to use	50.0	80.0	83.3	53.8	43.1	53.5	53.7	49.2	57.1
Disliked other methods	0.0	10.0	0.0	2.6	23.5	30.2	2.4	21.3	26.5
Recommended by service provider	0.0	0.0		2.6	2.0		2.4	1.6	
Recommended by friends/relatives		0.0	0.0		5.9	4.7		4.9	4.1
Recommended by husband	0.0	70.0	16.7	12.8	56.9	20.9	12.2	59.0	20.4
Desire for no more children	0.0	0.0	0.0	2.6	19.6	4.7	2.4	16.4	4.1
Reliable method	0.0	0.0		7.7	17.6		7.3	14.8	
<b>Total condom users</b>	<b>2</b>	<b>10</b>	<b>6</b>	<b>39</b>	<b>51</b>	<b>43</b>	<b>41</b>	<b>61</b>	<b>49</b>

Virtually all of current condom users said their husband was in favor of them using condoms (Table 4.49).

**Table 4.49 Percent distribution of currently married women aged 15-49 years who are currently using condoms by husband in-favors/oppose with method currently using and ecological regions**

Husband in-favor/oppose condom use	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
In-favor	100.0	100.0	100.0	100.0	98.0	100.0	100.0	98.4	100.0
Opposed	0.0	0.0	0.0	0.0	2.0	0.0	0.0	1.6	0.0
<b>Total (n) [Condom users]</b>	<b>2</b>	<b>10</b>	<b>6</b>	<b>39</b>	<b>51</b>	<b>43</b>	<b>41</b>	<b>61</b>	<b>49</b>

### 4.4.3 FUTURE USE INTENTION AND WILLINGNESS TO PAY<sup>3</sup>

The median maximum price 2011 respondents said they were willing to pay for a pack of three condoms was Rs. 10.0 which increased to Rs 12.5 in 2013 and to Rs 25 in 2015. For premium condom the median price the consumer were willing to pay was Rs 50, meaning that half would pay no more than Rs 50 for a premium condom and half would pay more. About 18% of those intending to use condoms in 2013, and 1.3 % in 2015 (for regular condom) did not provide a maximum price.

**Table 4.50 Percent distribution of currently married women aged 15-49 years who intended to use condoms in future by willingness to pay for condoms and maximum price willing to pay**

The maximum price you would be willing to pay for a pack of three condoms (in Nrs)	Both			
	2011	2013	2015	2015*
Less than 10	13.3	10.4	1.3	1.3
Rs 10	64.0	30.4	3.8	3.8
Rs 15	8.0	10.4	3.8	7.6
Rs 20	-	15.7	22.8	1.3
Rs 25	-	6.1	36.7	1.3
Rs 30	-	8.7	19.0	6.3
Rs 35			1.3	2.5
Rs 40			5.1	24.1
Rs 50			5.1	
More than 50				49.4
DK	14.7	18.3	1.3	2.5
Median	10.0	12.5	25.0	50.0
Std. Deviation	1.8	10.1	8.6	22.6
Range	6-15	5-50	5 - 50	20 - 80
<b>Total (n)</b>	<b>75</b>	<b>115</b>	<b>79</b>	<b>79</b>

For 2015, the willingness to pay indicates for premium condom.

## 4.5 EMERGENCY CONTRACEPTION

### 4.5.1 KNOWLEDGE AND USE OF EMERGENCY CONTRACEPTION

Table 4.51 shows knowledge of emergency contraception (ECP) among respondents. The overall percent of respondents reporting to know about ECP has declined from 17 % in 2011 to 14 % in 2015. In contrast, percent of respondents aware of ECP in mountains has increased from 9 % in 2011 to 11 % in 2015. So the result suggests that the decline in the knowledge on contraception was confined to hills.

Among those aware, majority (40 % in 2011, 53 % in 2013 and 71 % in 2015) described ECP as ‘an emergency measure after unprotected sexual intercourse’ and ‘pills that you take after you have sex’. Some others also explained the ECP as ‘an abortion pill, ending pregnancy’, and as ‘a pill taken by women up to 120 hours (5 days) after unprotected sex to prevent

<sup>3</sup> Note: given the low number of current condom users (there were 43), the study did not ask about usage patterns, such as brand used, where acquired, price paid, etc.

pregnancy'. Only 6 % in 2011 and 7 % in 2015 of those aware did not provide a description (table 4.51).

**Table 4.51 Percent distribution of currently married women aged 15-49 years by their knowledge of emergency contraception**

Ever heard about emergency contraception	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Yes	9.2	8.2	10.8	19.1	15.7	14.2	16.9	14.1	13.5
No	90.8	91.8	89.2	80.9	84.3	85.8	83.1	85.9	86.5
<b>Total</b>	<b>100.0</b>	<b>100.0</b>		<b>100.0</b>	<b>100.0</b>		<b>100.0</b>	<b>100.0</b>	
<b>Total (n)</b>	<b>305</b>	<b>330</b>	360	<b>1095</b>	<b>1290</b>	1260	<b>1400</b>	<b>1620</b>	1620
<b>Reported description of emergency contraceptives (Multiple response)</b>									
As an emergency measure after unprotected sexual intercourse							43.0	53.3	70.6
Pills that you take after you have sex							40.5	48.9	30.7
A pill that is taken by a women up to 120 hours after unprotected sex to prevent pregnancy							22.8	10.0	16.5
Abortion pill, ending pregnancy							7.2	24.5	6.9
a pill that is taken by a women within 24 hours									0.5
To be taken within 72 hours							2.5	0.0	
Avoiding unwanted pregnancy							1.7	0.0	
DK							5.5	5.2	6.9
<b>Total (n)</b>							<b>237</b>	<b>229</b>	<b>218</b>

Table 4.52 shows the percentage distribution of respondents who received any messages/information on ECP from any sources in the last six months. In 2011, 13 % of the respondents said that they received message on ECP which declined to 9 % in 2013 and again increased to 10 % in 2015. This indicates that about 10% of the respondents seems to have received information about ECP.

**Table 4.52 Percent distribution of currently married women aged 15-49 years who received information on emergency contraception in the last 6 months by source**

Exposure to any message or information from any source about ECP over the last 6 months	Both		
	2011	2013	2015
Yes	12.8	9.4	10.3
No	87.2	90.6	89.7
<b>Total (n)</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>
<b>Sources of information about ECP in the last 6 months (multiple response)</b>			
Radio	54.7	51.0	75.4
Television	27.4	44.4	53.9
Newspaper/magazine/broacher	3.9	7.8	2.4
Poster/Hoarding Board	1.1	5.2	3.6
Husband/partner			7.2
Friends/Relatives	43.6	19.0	26.9
Neighbor	12.8	5.9	4.2
FCHV	11.7	8.5	23.4
Health workers/Health facility	7.3	25.5	28.1
In a shop	0.6	2.0	
Hospital		0.7	
Others	0.6		2.4
DK/DR	1.1	2.6	
<b>Total (n)</b>	<b>170</b>	<b>153</b>	<b>167</b>

± Other includes: community meeting; office, women development training.

Radio and TV were the most mentioned sources for information ECP in 2013 and 2015 while it was radio followed by Friends/Relatives in 2011. Other sources of information mentioned (not in rank order) by the respondents were health workers/health facility and FCHV (Table 4.52).

Table 4.53 shows the percentage distribution of respondents who received information on ECP by background characteristics. Respondents from hills were more likely to have received information on ECP in the last 6 months than those in mountains. Women aged 30 to 49 were less likely to have received information on ECP than those in younger groups. Women who were educated were more likely to have received info on ECP than those who were relatively less educated. Similarly, poorest in comparison to the richest and those who are not exposed to any media compared to those who are exposed to media were less likely to have received info on ECP. For religion, caste/ethnicity and migration status of the respondents, the pattern of relationship with receiving information on ECP was not very consistent across surveys.

**Table 4.53 Percent distribution of currently married women aged 15-49 years by received information on emergency contraception in the last 6 months by their selected background characteristics**

Categories	Yes			No			Total (n)			Total %
	2011	2013	2015	2011	2013	2015	2011	2013	2015	
Region of residence										
Mountain	5.6	4.8	5.0	94.4	95.2	95.0	305	330	360	100
Hill	14.8	10.6	11.8	85.2	89.4	88.2	1095	1290	1260	100
Age of women (in years)										
15-19	16.1	6.5	13.2	83.9	93.5	86.8	87	77	76	100
20-29	15.8	14.4	14.3	84.2	85.6	85.7	637	654	713	100
30 to 49	9.5	6.1	6.6	90.5	93.9	93.4	676	889	831	100
Level of education										
None	3.3	1.2	2.2	96.7	98.8	97.8	749	763	692	100
Primary	12.8	5.4	2.8	87.2	94.6	97.2	250	315	322	100
Secondary	25.2	11.8	12.8	74.8	88.2	87.2	234	238	345	100
SLC or higher	37.7	32.6	37.9	62.3	67.4	62.1	167	304	261	100
Religion										
Hindu	11.8	9.9	10.7	88.2	90.1	89.3	1086	1431	1303	100
Others	15.9	6.3	8.5	84.1	93.6	91.5	314	189	317	100
Caste ethnicity										
Brahmin/ Chhetri	14.1	12.5	13.6	85.9	87.5	86.4	489	654	601	100
Janajati	14.9	7.8	10.1	85.1	92.2	89.9	217	499	680	100
Dalits	4.1	4.6	3.2	95.8	95.5	96.8	612	285	252	100
Newars	12.2	8.5	9.2	87.8	91.5	90.8	82	82	87	100
Madhesi caste		10.2		0.0	89.8			88		100
Migration status										
Migrant	11.8	12.8	18.7	88.2	87.2	81.3	1183	258	235	100
Non Migrant	18.0	8.8	8.9	82.0	91.2	91.1	217	1362	1385	100
Exposure to TV and/or radio										
None	2.8	1.3	0.0	97.2	98.8	100.0	507	716	290	100
Only one	10.5	12.8	4.1	89.5	87.2	95.9	579	681	541	100
Both	33.1	25.6	18.4	66.9	74.5	81.6	314	223	789	100
SES index										
Poorest	1.3	2.8	2.5	98.7	97.2	97.5	316	324	321	100
Second	3.5	5.6	2.5	96.5	94.4	97.5	285	323	326	100
Third	8.1	7.8	4.3	91.9	92.2	95.7	271	320	325	100
Fourth	23.5	8.5	16.0	76.5	91.5	84.0	263	329	324	100
Richest	30.6	22.6	26.2	69.4	77.4	73.8	265	324	324	100
<b>Total</b>	<b>12.7</b>	<b>9.4</b>	<b>10.3</b>	<b>87.3</b>	<b>90.6</b>	<b>89.7</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>	<b>100</b>

Majority the respondents in 2011 and 2013 who heard or saw something about ECP in the last six months mentioned the eCON slogan “Simple solution for difficult situation/*aftariya Parishthiti ma sajilo Upaya*” as the message/information they received. Whereas, in 2015 majority of the respondents were those who said to have seen “Medicine to be used to protect unwanted pregnancy”. There were about 31 % in 2011 and 2015, who also said that they have heard or seen it as “Emergency medicine”.

**Table 4.54 Percentage of respondents by messages seen or heard about ECP in the last 6 months, among those aware of ECP who recalled any information on ECP in the last six months**

Message recall (MR)	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Simple solution for difficult situation/(Aftariya Parishthiti ma sajiloUpaya)	88.2	81.3	38.9	88.5	66.2	47.0	88.5	67.8	46.1
Medicine to be used to protect unwanted pregnancy	11.8	37.5	66.7	3.8	39.7	57.0	4.6	39.5	58.1
Emergency medicine	0.0		27.8	0.6		30.9	0.6		30.5
To be consumed with 72 hours of unsafe sex		0.0			3.7			3.3	
Baby terminating medicine	0.0			2.5			2.3		
<b>Total (n)</b>	<b>17</b>	<b>16</b>	<b>18</b>	<b>157</b>	<b>136</b>	<b>149</b>	<b>174</b>	<b>152</b>	<b>167</b>

#### 4.5.2 AWARENESS OF BRANDS AND SOURCES OF SUPPLY OPINION ON AND EVER USED METHOD

When asked what ECP brand names they knew, eCON was mentioned by the most respondents in 2013 and 2015 while it was I-pill in 2011. There were very few respondents who recalled other brand names of ECP. Just over half of respondents aware of ECP did not cite any brand name in 2011 and 2013, while this was only 39 % in 2015. (Table 4.55).

**Table 4.55 Percent distribution of currently married women aged 15-49 years who have heard of ECP by brand names they recalled**

Brand recall	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
ECON	14.3	40.7	23.1	5.7	36.1	62.6	6.8	36.7	55.5
Femicon	14.3	3.7	0.0	3.8	4.5	1.7	5.1	4.4	1.4
I-Pill	21.4	11.1	0.0	16.3	13.9	12.3	16.9	13.5	10.1
Unwanted 72	0.0	0.0	0.0	0.0	1.5	5.6	0.0	1.3	4.6
Nilocon white	0.0	0.0		4.8	0.0		4.2	0.0	
Positioner 2	0.0	0.0		0.5	0.0		0.4	0.0	
DK	46.4	44.4	76.9	68.4	55.4	30.7	65.8	54.1	39.0
Total (%)	100.0	100.0		100.0	100.0		100.0	100.0	
<b>Total (heard of EC)</b>	<b>28</b>	<b>27</b>	<b>39</b>	<b>209</b>	<b>202</b>	<b>179</b>	<b>237</b>	<b>229</b>	<b>218</b>

In all surveys, the place mentioned by majority of the respondents where to get ECP the most among those aware of ECP was pharmacy. No clear pattern of sources across surveys was observed for other sources. However, the other important sources of supplies (not in rank order) were: private hospital/clinic, government hospital/clinic and health post, Marie Stopes, FHCVs, and sub health posts. 14 % in 2011 and 9 % in 2015 of those aware of ECP did not know where it could be obtained (Table 4.56).

**Table 4.56 Percent distribution of currently married women aged 15-49 years having heard of emergency contraception by knowledge of sources of supply**

Source of supply of EC	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Public sector</b>									
Govt. Hospital/Clinic	42.9	22.2	12.8	42.6	22.8	8.4	42.6	22.7	9.2
PHC Center	0.0	3.7		3.3	1.0		3.0	1.3	
Health Post	21.4	14.8	0.0	14.4	22.8	6.1	15.2	21.8	5.0
Sub-Health Post	3.6	0.0	0.0	1.4	2.0	0.6	1.7	1.7	0.5
FCHV	0.0	3.7	0.0	1.4	3.5	2.8	1.3	3.5	2.3
Other Govt.	0.0	0.0		0.0	0.5		0.0	0.4	
<b>Non-Government (NGO) sector</b>									
FPAN	0.0	0.0	0.0	1.0	1.5	6.1	0.8	1.3	5.0
Marie Stopes	3.6	0.0	0.0	0.5	5.9	3.9	0.8	5.2	3.2
Other NGO.	0.0	0.0		0.0	0.5		0.0	0.4	
<b>Private sector</b>									
Private Hospital/Clinic	64.3	25.9	10.3	12.9	27.2	48.0	19.0	27.1	41.3
Pharmacy	67.9	29.6	79.5	71.3	46.0	59.2	70.9	44.1	62.8
Sangini Outlet	0.0	0.0	0.0	0.0	1.0	14.0	0.0	0.9	11.5
Other Private	0.0	7.4	0.0	0.0	1.5	0.6	0.0	2.2	0.5
<b>Other sector</b>									
Friend/Relative	0.0	0.0		0.5	0.5		0.4	0.4	
Do not know/do not remember	7.1	29.6	12.8	14.4	19.3	8.4	13.5	20.5	9.2
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
<b>Total (heard of EC)</b>	<b>28</b>	<b>27</b>	<b>39</b>	<b>209</b>	<b>202</b>	<b>179</b>	<b>237</b>	<b>229</b>	<b>218</b>

Table 4.57 provides information on the perceived advantages and disadvantages of using ECP. The advantage given by the most respondents aware of ECP was ‘it can be used after sex to prevent pregnancy as a result of undesired sex’. Advantages other than this did not show a clear pattern across surveys and were distance far.

For disadvantages of ECP use, no clear pattern of results is observed across surveys. However, some of the disadvantages of using ECP mentioned by the respondents across surveys (not in rank orders) were: ‘it has many side effects’, ‘causes infertility’ and ‘ECP is difficult to get’. 78 % in 2011 and 39 % in 2015 did not mention any disadvantages.

**Table 4.57 Percent distribution of currently married women aged 15-49 years aware of ECP by perceived benefits and disadvantages of using emergency contraception**

Perceived benefits of using emergency contraceptives (Multi response)	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Can be used after sex to prevent pregnancy as a result of undesired sex	78.6	59.3	61.5	73.2	58.4	84.9	73.8	58.5	80.7
Effective method	10.7	3.7	7.7	9.1	6.4	3.9	9.3	6.1	4.6
Easy to use	21.4	11.1	5.1	6.2	7.9	2.8	8.0	8.3	3.2
Do not need to take something all the time			7.7			7.8			7.8
No one will know about it			2.6			5.6			5.0
Prevents Pregnancy	0.0	3.7		2.9	0.5		2.5	0.9	
Less side effects	0.0	0.0		1.4	2.0		1.3	1.7	
Can be discontinued if desired to have another child		0.0			3.0			2.6	
Long lasting		3.7			0.0			0.4	
Prevents STIs/HIV infection		3.7			0.5			0.9	
To be consumed within 2 days of unsafe sex		0.0			1.0			0.9	
DK	14.3	25.9	25.6	14.8	31.2	8.9	14.8	30.6	11.9
<b>Total aware of EC</b>	<b>28</b>	<b>27</b>		<b>209</b>	<b>202</b>		<b>237</b>	<b>229</b>	
<b>Perceived disadvantages of using emergency contraceptives (Multi response)</b>									
It has many side effects	7.1	3.7	5.1	3.3	18.8	10.1	3.8	17.0	9.2
It requires several visits to doctor	3.6	0.0	0.0	0.5	0.5	0.6	0.8	0.4	0.5
Difficult to get	17.9	25.9	7.7	1.0	6.4	15.1	3.0	8.7	13.8
Expensive	7.1	11.1	0.0	5.3	5.4	15.6	5.5	6.1	12.8
It causes infertility	21.4	11.1	5.1	8.6	11.4	25.1	10.1	11.4	21.6
Not accepted by husband	0.0	3.7	0.0	1.0	1.0	0.6	0.8	1.3	0.5
Not effective (becoming pregnant even used)		3.7	0.0		2.5	11.2		2.6	9.2
Does not prevent HIV/AIDS/STDs			0.0			19.0			15.6
Do not know how it works			0.0			6.1			5.0
Difficult to use	0.0	0.0		1.0	1.5		0.8	1.3	
It's use is prohibited for religious reasons	3.6	0.0		1.9	0.5		2.1	0.4	
Not accepted by other family members	3.6	7.4		1.0	1.5		1.3	2.2	
Excessive bleeding		0.0			1.0			0.9	
Causes dizziness		0.0			1.5			1.3	
Cause stomach ache		0.0			0.5			0.4	
Causes headache		3.7			0.5			0.9	
DK	53.6	48.1	84.6	79.9	55.0	28.5	76.8	54.1	38.5
<b>Total aware of EC</b>	<b>28</b>	<b>27</b>	<b>39</b>	<b>209</b>	<b>202</b>	<b>179</b>	<b>237</b>	<b>229</b>	<b>218</b>

In 2011 of the 237 who heard of ECP only 9 reported to have used it (3.8 %). In 2013 of the 229 who heard of EC, only 13 reported to use, that is 5.7 %. Similarly, in 2015 of the 218 who heard of EC, only 17 reported to use, that is 7.8 %. The use of ECP among currently married women in 2011, 2013 and 2015 was respectively: 0.6 %, 0.8 % and 1.0 % (Table 4.59).

**Table 4.58 Ever used EC, number and percentages among total sample and those aware of EC**

Ever used EC	Both		
	2011	2013	2015
Ever used ECP (Yes) – total number	9	13	17
Total (n = heard of EC)	237	229	218
Percentage who have used ECP among those who have heard of ECP	3.8	5.7	7.8
Percentage among total sample (currently married women)	0.6	0.8	1.0
<b>Total (n)</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

### 4.5.3 FUTURE USE INTENTION AND WILLINGNESS TO PAY

Table 4.59 shows the stated interest of respondents to buy an emergency contraceptive. Just over half of the aware of ECP in 2011 and 2013 said they would buy it if they felt that they were at a risk of being pregnant and did not want another child at that time. This increased to 83 % in 2015.

The median maximum price given in 2011 was NRs 90, which increased to NRs 100 in 2013 and to NRs 135 in 2015 who said they would consider buying ECP.

**Table 4.59 Percent distribution of currently married women aged 15-49 years having heard of emergency contraceptives by willingness to pay for it**

Willingness to buy emergency contraceptives if felt at risk of being pregnant and did not want another child	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Yes	53.6	59.3	69.2	56.9	52.5	86.0	56.5	53.3	83.0
No	42.9	29.6	30.8	43.1	36.6	14.0	43.0	35.8	17.0
DK	3.6	11.1		0.0	10.9		0.4	10.9	
Total aware of EC	28	27	39	209	202	179	237	229	218
<b>The maximum price willing to pay for emergency contraception (in Nrs)</b>									
Less than Rs 80	0.0	6.3	2.9	0.0	11.3	4.3	0.0	10.7	4.0
Rs 80-85	46.7	18.8	0.0	4.2	12.3	1.2	9.0	13.1	1.0
Rs 90 to 99	53.3	12.5	2.9	63.9	8.5	0.0	62.7	9.0	0.5
Rs 100	0.0	43.8	2.9	28.6	50.0	6.1	25.4	49.2	5.5
Rs 101 and more	0.0	18.8	91.4	3.4	17.9	88.4	3.0	18.0	88.9
<b>Total (n)</b>	<b>15</b>	<b>16</b>	<b>35</b>	<b>119</b>	<b>106</b>	<b>164</b>	<b>134</b>	<b>122</b>	<b>199</b>
<b>Mean</b>	<b>87.0</b>	<b>110</b>	<b>140</b>	<b>96.0</b>	<b>119</b>	<b>152</b>	<b>94.9</b>	<b>117</b>	<b>150</b>
<b>Median</b>	<b>90.0</b>	<b>100</b>	<b>150</b>	<b>90.0</b>	<b>100</b>	<b>135</b>	<b>90.0</b>	<b>100</b>	<b>135</b>
Std. Deviation	4.1	56.8	33.5	16.3	87.5	67.6	15.6	84.1	63.7
Range	80-90	50-300	50 -200	85-200	20-500	30 - 500	80-200	20-500	30 - 500

### 4.6 ATTITUDES TOWARDS CONTRACEPTION AND METHODS

A series of statements were given to the respondents to examine their attitudes towards contraception. Respondents either agreed or disagreed with the statements. On the basis of agreement or disagreement, mean ratings were calculated. The level of agreement or disagreement is stronger if the rating is closer to 1 or -1 and is weaker if the rating is closer to 0. The ratings of the 15 statements are presented in Table 4.60.

Among the five statements related to contraception in general, most of the respondents (0.941 in 2011, 0.720 in 2013 and 0.970 in 2015) agreed with the statement, "*If you stop using a contraceptive method, you can get pregnant again*" and respondents generally agreed with "*Family members have lots of influence on the use of contraception by women in this community*" (0.414 in 2011, 0.479 in 2013 and 0.420 in 2015) and generally disagreed with "*My family does not talk about contraception*" (-0.134 in 2011, -0.420 in 2013 and -0.360 in 2015), indicating that many did talk about it. Overall respondents tended to neither agree nor disagree very strongly (scores near 0) with the statements "*Shopkeepers make women feel bad when buying contraceptives*" -0.322 in 2011, -0.050 in 2013 and - 0.300 in 2015. The statement "*most people around here do not care who uses or does not use contraceptives*" do not show a clear pattern of agreement or disagreement across surveys.

Among the statements related to injectables, most respondents agreed with the statement *"Injectables are easier to use than other contraceptives"* (0.653, 0.590 and 0.740 in 2011, 2013 and 2015 respectively) and generally disagreed with the statement *"I am afraid to take injections in the pharmacy, since others might see me"* (-0.582, -0.270 and -0.460 in 2011, 2013 and 2015 respectively). There were lower levels of agreement with the statement *"injections can make you gain weight"* and disagreement with the statement *"children born by a woman who use injections can have many things wrong with them."*

In case of condoms, two statements were presented to the respondents. There was a low overall level of disagreement with statements *"Only bad women buy condoms"* and *"Condoms are used for sex with someone other than your spouse"* in 2013 and 2015. These low levels indicate that overall, condoms were not seen as only for use outside of marriage.

Similarly, there was relatively high disagreement with the one statement related to OCP *"Oral contraceptive pills have more side effects than other contraceptives"* in 2013 while there was low level of agreement with the same statement in 2015, indicating that most of the people did not think that oral contraceptive had more side effects than other methods.

**Table 4.60 Mean ratings of currently married women aged 15-49 years on degree of agreement on different aspects of contraception and ecological regions**

Degree of agreement	Mountain			Hill			Total		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>On contraception</b>									
If you stop using a contraceptive method, you can get pregnant again.	0.928	0.610	0.990	0.945	0.750	0.970	0.941	0.720	0.970
Most people around here do not care who uses or does not use contraception	0.348	0.150	0.420	0.438	0.070	0.520	0.419	0.090	0.500
Family members have lots of influence on the use of contraception by women in this community	0.348	0.570	0.300	0.432	0.440	0.450	0.414	0.470	0.420
Shopkeepers make women feel bad when buying contraceptives.	-0.262	0.100	-0.370	-0.339	-0.090	-0.270	-0.322	-0.050	-0.300
My family does not talk about contraception	-0.148	-0.250	-0.440	-0.131	-0.460	-0.330	-0.134	-0.420	-0.360
<b>On Injectables</b>									
Injections are easier to use than other contraceptives	0.708	0.610	0.700	0.637	0.580	0.750	0.653	0.590	0.740
Injections can make you gain weight.	0.554	0.010	0.270	0.385	0.230	0.450	0.421	0.190	0.410
I'm afraid to take Injections in the pharmacy, since others might see me.	-0.515	-0.150	-0.420	-0.601	-0.300	-0.470	-0.582	-0.270	-0.460
Children born by a woman who used Injections can have many things wrong with them.	-0.207	0.050	0.040	-0.135	-0.130	-0.020	-0.151	-0.100	-0.010
<b>On condoms</b>									
Only bad women buy condoms.	0.492	-0.050	-0.280	0.383	-0.210	-0.380	0.406	-0.180	-0.350
Condoms are only used for sex with someone other than your spouse.	0.403	-0.240	-0.510	0.270	-0.140	-0.470	0.299	-0.160	-0.480
<b>On emergency contraception</b>									
Most people think that using emergency contraception is bad.	0.033	0.000		0.123	0.010		0.104	0.010	
Emergency contraception is a good way to prevent pregnancy – you can just take one whenever you're afraid you might be pregnant.	0.069	0.070		0.137	0.100		0.122	0.100	
It is OK to take emergency contraceptive pills continuously instead of another family planning method.		-0.050			-0.080			-0.070	
<b>On OCP</b>									
Oral contraceptive pills have more side effects than other contraceptives.		-0.710	0.028		-0.680	0.036		-0.680	0.034
<b>Total (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

## CHAPTER 5: DIARRHEA

### 5.1 AGE, SEX AND ECOLOGICAL REGIONS DISTRIBUTION AMONG CHILDREN UNDER FIVE YEARS OF AGE

Just about half of respondents had any children under five years of age living with them; 47% in 2011 and 39 % in 2015 had one child under 5, 11 % in 2011 and 12 % in 2015 had two children under five and under 1% had three. The data, except in 2011 shows those women in the mountains were more likely to have one or more children living with them than those in the hills. The rest of this chapter includes only those women who had at least one child under five living with her.

**Table 5.1 Number of children under 5 living with mother at survey by ecological region**

Number of children under 5 living with mother at survey	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
0	48.5	39.1	35.8	39.8	55.3	51.7	41.7	52.0	48.2
1	36.4	45.8	43.6	50.3	34.6	37.6	47.3	36.9	39.0
2	15.1	14.2	19.7	9.9	9.5	10.3	11.0	10.4	12.4
3	0.0	0.9	0.8	0.0	0.7	0.3	0.0	0.7	0.4
<b>Total; (n)</b>	<b>305</b>	<b>330</b>	<b>360</b>	<b>1095</b>	<b>1290</b>	<b>1260</b>	<b>1400</b>	<b>1620</b>	<b>1620</b>

Table 5.2 shows the percent distribution of children less than five years of age by their age and sex. In 2011 and 2013, 54 % of the total children under 5 were boys which slightly decreased to 52 % in 2015, still showing more boys than girls among the total children less than five years of age.

In 2013, the largest group of children (33%) was ‘6-11 months’ where as in 2015 the largest group of children was in 3-4 years of age. Thus the distribution of the children by their age across surveys shows that the largest representation is from 6 month to 4 years.

The mean age was just under one year in 2013; however it was 2 years in 2011 and 2015. Gender and age categories are fairly similar in hills and mountains as well as in 2011 and 2015. While the gender profile was similar across surveys, the age profile was not similar in 2011 and 2015. There were a total of 970 children under five, representing a mean of 1.93 children living with the 816 women in 2011. Similarly, there were 1047 children representing a mean of 1.9 living with 839 women in 2015. In contrast, there were 959 children representing a mean of 0.97 living with 778 women in 2013.

**Table 5.2 Percent distribution of all respondents' children under five years of age by their age at survey, sex and ecological regions**

Sex of child	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Boy	53.7	54.2	52.1	52.4	55.8	52.6	52.7	55.4	52.4
Girl	46.3	45.8	47.9	47.6	44.2	47.4	47.3	44.6	47.6
<b>Age of child</b>									
<2 months	3.0	6.4	3.0	2.6	5.2	2.8	2.7	5.5	2.9
2-5 months	9.9	26.3	8.9	7.4	22.9	6.3	7.9	23.8	7.1
6-11 months	10.3	31.9	14.4	10.4	33.1	11.6	10.4	32.7	12.4
1-2 years	45.8	15.1	18.4	39.5	18.9	21.4	40.8	17.9	20.5
3-4 years	31.0	20.3	55.4	40.0	19.9	57.8	38.1	20.0	57.1
Mean (Years)	1.77	0.93	1.9	1.97	0.99	1.9	1.93	0.97	1.90
Median (Years)	2	0	2	2	0	2	2	0	2
Std. Deviation	1.42	1.42	1.5	1.41	1.43	1.4	1.42	1.42	1.4
<b>Total (n)</b>	<b>203</b>	<b>251</b>	<b>305</b>	<b>767</b>	<b>708</b>	<b>742</b>	<b>970</b>	<b>959</b>	<b>1047</b>

## 5.2 RECENT DIARRHEAL INCIDENCE AMONG CHILDREN UNDER FIVE YEARS OF AGE

Table 5.3 illustrates the percent distribution of children under 5 by incidence of diarrhea in last two weeks and last one month. In 2011, 15% of all children under five had diarrhea in the last 2 weeks and 22 % in the last month. This figure for 2013 increased to 25 % and 32 % respectively. In contrast, the incident of diarrhea last two weeks and last one month among under-five children sharply declined to 12 % and 22 % in 2015. This indicates that the incidence of diarrhea in recent past has declined.

The two weeks diarrheal incidence was higher in the mountains than in the hills in 2013 and 2015 as contrast to 2011. However, the diarrheal incidents of one month period were higher in mountains than in hills in all three surveys.

**Table 5.3 Percent distribution of children under five years of age by incidence of diarrhea in last two weeks, last one month and ecological regions**

Incidence of diarrhea in the last 2 weeks	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Yes	14.8	31.5	17.4	15.4	22.2	9.8	15.3	24.6	12.0
No	85.2	68.5	82.6	84.6	77.8	90.2	84.7	75.4	88.0
<b>Total (n)</b>	<b>203</b>	<b>251</b>	<b>305</b>	<b>767</b>	<b>708</b>	<b>742</b>	<b>970</b>	<b>959</b>	<b>1047</b>
Diarrheal incidence in the last one month (including last 2 weeks)									
Yes	22.7	38.6	25.9	21.5	29.1	20.6	22.0	31.6	22.2
No	77.3	61.4	74.1	78.2	70.9	79.4	78.0	68.4	77.8
<b>Total (n)</b>	<b>203</b>	<b>251</b>	<b>305</b>	<b>767</b>	<b>708</b>	<b>742</b>	<b>970</b>	<b>959</b>	<b>1047</b>

Table 5.4 shows that there was a higher incidence of diarrhea in the last two weeks among children in household that did not had a toilet facility than among those who did have one. This was especially due to the difference in the mountain region, where 41% of children with no toilet facility had diarrhea in the previous two weeks compared to 28% of those with a toilet

facility at home; in the hills, the percentage was much closer – and actually was HIGHER among those who had a toilet facility at home.

**Table 5.4 Percentage distributions of children under five years of age with diarrhea in the past 2 weeks by availability of toilet facility in their house and incidence of diarrhea, 2013**

Description	Mountain			Hills			Total		
	No facility	Have facility	Total	No facility	Have facility	Total	No facility	Have facility	Total
Had diarrhea in last two weeks 2013	40.5	27.7	31.5	20.5	22.6	22.2	27.7	23.8	24.6
Total (n) 2013	74	177	251	132	576	708	206	753	959
Had diarrhea in last two weeks 2015	26.3	16.8	17.4	5.9	10.1	9.8	11.4	12.1	12.0
<b>Total (n) 2015</b>	<b>19</b>	<b>286</b>	<b>305</b>	<b>51</b>	<b>691</b>	<b>742</b>	<b>70</b>	<b>977</b>	<b>1047</b>

### 5.3 ORAL REHYDRATION SOLUTION (ORS)

#### 5.3.1 AWARENESS OF PRODUCT AND EXPOSURE TO MESSAGES IN THE LAST 6 MONTHS

Table 5.5 shows the percentage distribution of respondents by knowledge of ORS. The data reveals that awareness about ORS among mothers of children under five years of age is increasing over the survey years from 93 % in 2011 to 99 % in 2015. In 2015, all sub-categories had over 98% awareness and the differences by selected background characteristics are likely not to be significant.

**Table 5.5 Percent distribution of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey by knowledge of ORS and selected background characteristics**

Categories	Yes			No			DK			Total			Percent
	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	
<b>Region of residence</b>													
Mountain	88.5	96.0	99.1	11.5	3.5	0.9		0.5		157	201	231	100
Hill	94.2	97.7	99.2	5.8	2.3	0.8		0.0		659	577	608	100
<b>Age of women (in years)</b>													
15-19	85.7	91.2	100.0	14.3	5.9	0.0		2.9		42	34	43	100
20-29	93.9	98.7	99.1	6.1	1.3	0.9		0.0		512	479	553	100
30-34	92.7	95.5	99.2	7.3	4.5	0.8		0.0		262	265	243	100
<b>Level of education</b>													
None	88.5	95.9	98.3	11.5	4.1	1.7		0.0		408	345	287	100
Primary	95.5	96.7	98.8	4.5	2.6	1.2		0.7		154	153	164	100
Secondary	99.3	98.3	100.0	0.7	1.7	0.0		0.0		145	119	209	100
SLC or higher	99.1	100.0	100.0	0.9	0.0	0.0		0.0		109	161	179	100
<b>Religion</b>													
Hindu	93.5	97.4	99.5	6.5	2.5	0.5		0.1		631	682	649	100
Others	91.9	96.9	97.9	8.1	3.1	2.1		0.0		185	96	190	100
<b>Caste ethnicity</b>													
Brahmin Chhetri	94.4	96.5	100.0	5.6	3.5	0.0		0.0		268	314	278	100
Janajati	93.8	97.8	98.6	6.2	2.2	1.4		0.0		354	224	356	100
Dalits	87.0	98.6	98.8	13.0	1.4	1.3		0.0		146	147	160	100
Newars	100.0	91.4	100.0		5.7	0.0		2.9		48	35	45	100
Madhesi caste		100.0			0.0			0.0			55		100
<b>Migration status</b>													
Migrant	92.8	98.5	99.2	7.2	1.5	0.8		0.0		694	133	126	100
Non Migrant	95.1	97.1	99.2	4.9	2.8	0.8		0.2		122	645	713	100
<b>Exposure to TV and/or radio</b>													
None	85.6	95.2	95.9	14.4	4.8	4.1		0.0		306	373	145	100
Only one	97.3	99.4	99.7	2.7	0.3	0.3		0.3		332	327	298	100
Both	98.30	98.7	100.0	1.70	1.3	0.0		0.0		178	78	396	100
<b>SES index</b>													
Poorest	86.7	96.1	97.0	13.3	3.4	3.0		0.6		211	179	201	100
Second	90.9	96.4	99.4	9.1	3.6	0.6		0.0		176	166	156	100
Third	93.4	98.2	100.0	6.6	1.8	0.0		0.0		151	163	154	100
Fourth	99.3	97.0	100.0	0.7	3.0	0.0		0.0		145	167	168	100
Richest	99.2	100.0	100.0	0.8	0.0	0.0		0.0		133	103	160	100
Total	93.1	97.3	99.2	6.9	2.6	0.8		0.1		816	778	839	100

Table 5.6 shows the percent distributions of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of ORS and were exposed to messages/info on ORS in the last 6 months by source of information. In 2011, 61 % of the total respondents reported hearing or seeing something about ORS during the last six months which in 2015 has increased to 70 %, indicating exposure in the last six months was somewhat higher in 2015 than in 2011.

In 2013 and 2015, radio was the main source cited, by 52 and 71% of respondents who reported hearing or seeing something about ORS through radio in the last 6 months, followed by FCHVs ( 49 and 62 %), health facility and/or health worker (46 and 69%), television (16 and 31 %) and neighbors (11 and 17 %). However, in 2011 this pattern was slightly different that neighbor was the most popular source followed by radio, ion shop, FCHV, friends/relatives and TV.

**Table 5.6 Percent distributions of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of ORS and were exposed to messages/info on ORS in the last 6 months by source of information**

Exposure to any messages or information from any source about ORS over the last 6 months	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Yes	58.3	47.2	55.8	62.0	56.4	75.3	61.3	54.0	70.0
No	41.7	52.3	44.2	34.6	41.3	24.7	35.9	44.1	30.0
Do not remember	-	0.5		3.4	2.3		2.8	1.8	
<b>Total</b>	<b>139</b>	<b>193</b>	231	<b>621</b>	<b>564</b>	608	<b>760</b>	<b>757</b>	839
<b>Source</b>									
Radio	39.5	56.0	58.1	56.9	50.6	74.0	53.9	51.8	70.5
Television	2.5	4.4	11.6	14.3	18.9	36.5	12.2	15.6	31.0
Newspaper/magazine	1.2	1.1	0.0	1.8	2.5	0.7	1.7	2.2	0.5
Poster/Hoarding board	-	1.1	8.5	3.6	3.8	4.8	3.0	3.2	5.6
Street dramas		0.0	0.0		0.3	0.2		0.2	0.2
Friends/relatives	16.0	6.6	22.5	13.5	10.1	32.3	13.9	9.3	30.2
FCHV	9.9	67.0	55.0	19.0	43.4	63.8	17.4	48.7	61.8
Health facility or health worker	-	38.5	73.6	0.5	48.4	67.7	0.4	46.2	69.0
In a shop	39.5	3.3	8.5	33.8	4.1	11.4	34.8	3.9	10.7
Hospital		0.0		4	1.3		4	1.0	
School/ College		2.2	0.8	3	0.9	1.7	5	1.2	1.5
Eco Himal (NGO)		1.1	0.0	1	0.3	0.2	2	0.5	0.2
Neighbor	67.9	16.5	13.2	66.5	9.1	17.9	66.7	10.8	16.9
Radio Sanzal Group		0.0		1	0.3		1	0.2	
Education session			0.0			0.4			0.3
Cinema hall/Theater			0.0			0.2			0.2
Banner			0.8			0.2			0.3
Village health talk			3.1			3.5			3.4
Training regarding diarrhea		1.1		1	0.3		2	0.5	
Other±	1.2			-			0.2		
DK		0.0		1	0.3		1	0.2	
<b>Total (n)</b>	<b>81</b>	<b>91</b>	<b>129</b>	<b>385</b>	<b>318</b>	<b>458</b>	<b>466</b>	<b>409</b>	<b>587</b>

± Other includes: Training, Group meeting, Schools, husbands

Table 5.7 provides the percent distribution of respondents who had heard of or seen something about ORS in the last 6 months by selected background characteristics.

Among the different age groups, migrants than non-migrants, educated than not educated, exposed to media than not exposed and those who are living in mountains than living in hills were more likely to have heard or seen something about ORS in the last six months. For other variables, the pattern of relation with heard or seen something about ORS in the last six months was not very clear.

**Table 5.7 Percent distributions of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of ORS and were exposed to messages/info on ORS in the last 6 months by selected background characteristics**

Categories	Yes			No			DK			Total			Percent
	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	
<b>Region of residence</b>													
Mountain	58.3	47.2	55.8	41.7	52.3	44.2	0.0	0.5		139	193	231	100
Hill	62.0	56.4	75.3	34.6	41.3	24.7	3.4	2.3		621	564	608	100
<b>Age of women (in years)</b>													
15-19	63.9	48.4	74.4	30.6	48.4	25.6	5.6	3.2		36	31	43	100
20-29	62.2	54.5	72.5	34.5	42.9	27.5	3.3	2.5		481	473	553	100
30 - 49	59.3	53.8	63.4	39.5	45.8	36.6	1.2	0.4		243	253	243	100
<b>Level of education</b>													
None	49.0	46.2	58.5	48.8	52.9	41.5	2.2	0.9		361	331	287	100
Primary	68.0	50.7	65.2	27.9	45.9	34.8	4.1	3.4		147	148	164	100
Secondary	75.7	54.7	75.6	20.1	42.7	24.4	4.2	2.6		144	117	209	100
SLC or higher	74.1	72.7	86.0	25.0	25.5	14.0	0.9	1.9		108	161	179	100
<b>Religion</b>													
Hindu	55.9	55.6	72.4	40.8	42.3	27.6	3.2	2.1		590	664	649	100
Others	80.0	43.0	61.6	18.8	57.0	38.4	1.2	0.0		170	93	190	100
<b>Caste ethnicity</b>													
Brahmin Chhetri	53.8	60.1	77.3	41.9	38.3	22.7	4.3	1.7		253	303	278	100
Janajati	75.9	47.5	64.6	22.6	51.1	35.4	1.5	1.4		332	219	356	100
Dalits	40.9	53.1	70.0	55.1	44.8	30.0	3.9	2.1		127	145	160	100
Newars	54.2	50.0	66.7	45.8	43.8	33.3	0.0	6.3		48	32	45	100
Madhesi caste		50.9			47.3			1.8			55		100
<b>Migration status</b>													
Migrant	59.3	57.3	79.4	37.7	39.7	20.6	3.0	3.1		644	131	126	100
Non Migrant	72.4	53.4	68.3	25.9	45.0	31.7	1.7	1.6		116	626	713	100
<b>Exposure to TV and/or radio</b>													
None	38.2	39.2	47.6	56.5	59.7	52.4	5.3	1.1		262	355	145	100
Only one	70.0	66.5	69.5	27.9	31.7	30.5	2.2	1.8		323	325	298	100
Both	80.0	70.1	78.5	20.0	24.7	21.5	0.0	5.2		175	77	396	100
<b>SES index</b>													
Poorest	42.6	51.2	64.7	53.6	48.3	35.3	5.0	0.6		183	172	201	100
Second	56.3	63.1	57.1	40.7	36.3	42.9	1.9	0.6		160	160	156	100
Third	61.7	45.0	67.5	35.5	51.9	32.5	2.8	3.1		141	160	154	100
Fourth	78.5	53.7	81.0	18.8	43.8	19.0	2.8	2.5		144	162	168	100
Richest	74.2	59.2	80.0	25.0	37.9	20.0	0.8	2.9		132	103	160	100
<b>Total</b>	<b>61.3</b>	<b>54.0</b>	<b>70.0</b>	<b>35.9</b>	<b>44.1</b>	<b>30.0</b>	<b>2.8</b>	<b>1.8</b>		<b>760</b>	<b>757</b>	<b>839</b>	<b>100</b>

Table 5.8 provides results by messages seen or heard by the respondents in the last six months. Among the various messages, the three main messages cited as having seen/heard in the last six months were “use ORS for the treatment of diarrhea” , “Mix a packet of ORS with 1 liter of clean water” and “Give ORS frequently”. A small percentage said they had seen/heard “It is available in nearby medical and other shops”.

**Table 5.8** Percent distributions of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have seen/heard of messages related to ORS in last 6 months by type of messages

Response	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Use ORS for the treatment of diarrhea	76.5	69.2	96.1	70.6	52.8	88.9	71.7	56.5	90.5
Mix a packet of ORS with 1 liter of clean water	65.4	51.6	68.2	66.5	57.2	74.0	66.3	56.0	72.7
Give ORS frequently	48.1	47.3	25.6	48.8	47.5	36.2	48.7	47.4	33.9
It is available in nearby medical and other shops	16.0	6.6	7.0	9.1	7.9	9.4	10.3	7.6	8.9
Punarjalia Upachaar Ko Laagi (Nava Jeevan in Radio and print)			8.5			2.2			3.6
To give ORS within 24 hours of diarrhea	-			0.8			0.6		
Dissolve in boiled and cooled water		0.0			0.6			0.5	
Consume when the pressure is low		0.0			0.3			0.2	
Dissolve in two <i>karuwa</i> (type of vessel used to drink water) of water		0.0			0.6			0.5	
Consume every time there is diarrhea		1.1			0.6			0.7	
Other (one may get diarrhea during rainy season)	-			0.3			0.2		
DK/NR	1.2	0.0		1.3	1.9		1.3	1.5	
<b>Total (n)</b>	<b>81</b>	<b>91</b>	<b>129</b>	<b>385</b>	<b>318</b>	<b>458</b>	<b>466</b>	<b>409</b>	<b>587</b>

### 5.3.2 BRAND AWARENESS, OPINIONS AND SOURCES OF SUPPLY

As shown in Table 5.9, in all these surveys over 89 % of respondents spontaneously recalled *Jeevan Jal*. The other brands spontaneously recalled by respondents were *Nava Jeevan*. Less than 5% mentioned other brands like *Jeevan Bal*, *Sakti Jal*, *Electrobion* and *Hydrate*. After probing, the total percentage of respondents recalling *Jeevan Jal* was over 97 % from 95 % in 2011, 98 % from 96 % in 2013 and 96 % from 89 % in 2015. The recall for other brands also increased after probing.

**Table 5.9 Percent distributions of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of ORS by brand and ecological regions**

Brand recall	Mountain			Hill			Both			Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015
	Spontaneous									Total after probing								
<i>Jeevan Jal</i>	94.2	97.4	74.7	95.3	94.9	94.9	95.1	95.5	89.3	99.3	99.5	91.7	97.7	99.1	97.3	98.0	99.2	95.8
<i>Nava Jeevan</i>	28.1	6.2	3.1	30.8	17.0	23.9	30.3	14.3	18.1	36.7	28.5	33.2	38.0	45.2	57.4	37.8	41.0	50.7
<i>Nawa Jal</i>	5.0	1.6	1.7	4.5	3.9	5.8	4.6	3.3	4.7	6.5	10.4	17.9	7.1	22.2	22.4	7.0	19.2	21.2
<i>Jeevan Bal</i>	5.0	0.5	1.3	4.3	1.1	2.3	4.5	0.9	2.0	7.2	9.3	7.4	6.3	12.9	11.6	6.4	12.0	10.5
<i>Sakti Jal</i>	-	0.5	0.9	0.6	0.5	5.5	0.5	0.5	4.2	-	10.4	7.4	1.1	16.3	17.9	0.9	14.8	15.0
<i>Relyte</i>	0.7	0.0	0.0	-	0.4	1.3	0.1	0.3	1.0	0.7	0.5	1.3	-	2.1	4.1	0.1	1.7	3.4
<i>Revive</i>	-	0.0	0.0	0.2	0.0	0.5	0.1	0.0	0.4	-	1.0	0.0	0.2	1.6	3.0	0.1	1.5	2.2
<i>Electrobion</i>	-	1.6	0.0	-	0.7	0.3	-	0.9	0.2	-	6.7	0.9	0.2	3.5	4.1	0.1	4.4	3.2
<i>Orental</i>		0.5	0.0		0.0	0.2		0.1	0.1		0.5	0.0		0.5	0.2		0.5	0.1
<i>Hydrate</i>		0.0			0.9			0.7			0.0			0.9			0.7	
<i>Amrit Dhara</i>		0.0			0.2			0.1			0.0			0.2			0.1	
<i>Do not know</i>			25.3				3.3			9.4		7.9			1.3			3.1
<b>Total (n)</b>	<b>139</b>	<b>193</b>	<b>229</b>	<b>621</b>	<b>564</b>	<b>603</b>	<b>760</b>	<b>757</b>	<b>832</b>	<b>139</b>	<b>193</b>	<b>229</b>	<b>621</b>	<b>564</b>	<b>603</b>	<b>760</b>	<b>757</b>	<b>832</b>

Table 5.10 shows the sources of supply of ORS by ecological regions. The four main supply sources for ORS mentioned by respondents were health post, pharmacy, FCHVs, government hospital/clinic. Other sources were Private Hospital/Clinic and sub/health posts.

Almost 100% respondents in all three surveys with a child under five mentioned at least one source of supply for ORS and 43 to 56 % mentioned at least three sources of supply.

**Table 5.10 Percent distributions of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of ORS by sources of supply and ecological regions**

Knowledge about sources of getting or buying ORS (Multiple Response)	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Public sector</b>									
Govt. Hospital/Clinic	25.2	49.7	17.9	27.4	30.7	35.2	27.0	35.5	30.4
PHC Center	10.8	0.5	17.0	6.1	3.4	7.5	7.0	2.6	10.1
Health Post	70.5	75.1	76.9	54.4	77.5	75.5	57.4	76.9	75.8
Sub-Health Post	10.1	21.2	7.0	22.2	17.4	29.2	20.0	18.4	23.1
PHC Outreach	1.4	0.0	13.5	1.1	0.2	5.8	1.2	0.1	7.9
Mobile Clinic	0.7	2.1	0.0	-	1.8	0.5	0.1	1.8	0.4
FCHV	51.1	60.1	47.2	53.1	38.8	60.4	52.8	44.3	56.7
Other government	0.7		2.2	0.3		0.0	0.4		0.6
<b>Non-Governmental (NGO) sector</b>									
FPAN		0.0	0.0		0.2	0.5		0.1	0.4
Other NGO.		0.5			0.0			0.1	
<b>Private medical sector</b>									
Private Hospital/Clinic	19.4	9.3	4.4	16.1	14.7	19.9	16.7	13.3	15.6
Pharmacy	46.8	37.8	48.0	60.2	50.4	63.2	57.8	47.2	59.0
Sangini Outlet	-	0.5	0.0	0.5	0.0	2.7	0.4	0.1	1.9
Other Private		1.6	0.0		0.7	0.3		0.9	0.2
<b>Other source</b>									
Shop	-	3.6	1.3	3.9	4.3	1.3	3.2	4.1	1.3
Friend/Relative	0.7	2.1	0.4	0.5	0.9	0.8	0.5	1.2	0.7
Do not know/ do not remember	0.7	0.0		0.2	0.4		0.3	0.3	
Knows at least one source of supply	100	100	100	100	99.6	100	100	99.7	100
Knows at least three sources of supply	36.0	54.4	35.8	44.3	40.6	63.5	42.8	44.1	55.9
<b>Total (n)</b>	<b>139</b>	<b>193</b>	<b>229</b>	<b>621</b>	<b>564</b>	<b>603</b>	<b>760</b>	<b>757</b>	<b>832</b>

### 5.3.3 USE OF PRODUCT

About one-third of respondents (with a child under five and aware of ORS) said they gave ORS to their youngest child the last time s/he had diarrhea and about the same percentage said they gave it to their next youngest child. About half of respondents said that they had given ORS to some 'child under five' in the past. Therefore, about half of all mothers currently with a child under five have never given ORS to her child under five (Table 5.11).

**Table 5.11 Percentage of respondents who had given ORS to their youngest child during last diarrheal episode or any children below five years of age in the past, among those who had heard of ORS (2013)**

Response category	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Gave ORS to youngest child during last diarrheal episode</b>									
Yes	42.4	32.6	31.4	41.4	34.6	38.6	41.6	34.1	36.7
No	57.6	66.8	68.6	58.6	65.2	61.4	58.4	65.7	63.3
DK		0.5			0.2			0.3	
<b>Total (n)</b>	<b>139</b>	<b>193</b>	<b>229</b>	<b>621</b>	<b>564</b>	<b>603</b>	<b>760</b>	<b>757</b>	<b>832</b>
<b>Gave ORS to next youngest child during last diarrheal episode</b>									
Yes	50.0	27.7	53.4	46.0	38.9	42.0	47.1	35.8	46.1
No	50.0	72.3	46.6	54.0	61.1	58.0	52.9	64.2	53.9
DK	0.0	6.4		1.0	6.3		0.7	6.4	
Total (n)	38	47	73	100	126	131	138	173	204
<b>Ever given ORS to under 5 child</b>									
Yes	54.0	46.1	46.7	46.7	52.3	49.9	48.0	50.7	49.0
No	46.0	51.3	53.3	53.3	46.1	50.1	52.0	47.4	51.0
DK		2.6			1.6			1.8	
<b>Total (n)</b>	<b>139</b>	<b>193</b>	<b>229</b>	<b>621</b>	<b>564</b>	<b>603</b>	<b>760</b>	<b>757</b>	<b>832</b>

Table 5.12 shows the percent distribution of respondents with children under 5 who had ever given ORS to a child under 5 years of age by background characteristics. The table shows that just about half of all respondents aware of ORS in 2011, 2013 and 2015 had ever given it.

Among the differences found: Older women than younger women, Hindus than non-Hindus and non-migrant than migrants were more likely to give ORS to their child. For other groups, the pattern was not clear across surveys.

**Table 5.12 Percent distribution of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and has heard of ORS who have ever used for children below five years of age by selected background characteristics**

Categories	Yes			No			DK			Total		
	2011	2013	2015	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Region of Residence</b>												
Mountain	54.0	46.1	46.7	46.0	51.3	53.3		2.6		139	193	229
Hill	46.7	52.3	49.9	53.3	46.1	50.1		1.6		621	564	603
<b>Age of women (in years)</b>												
15-19	30.6	22.6	41.9	69.4	77.4	58.1		0.0		36	31	43
20-29	48.2	53.1	48.2	51.8	45.2	51.8		1.7		481	473	548
30-49 9	50.2	49.8	52.3	49.8	47.8	47.7		2.4		243	253	241
<b>Level of education</b>												
None	54.6	51.1	46.8	45.4	47.1	53.2		1.8		361	331	282
Primary	38.8	47.3	53.1	61.2	49.3	46.9		3.4		147	148	162
Secondary	43.1	53.0	45.0	56.9	47.0	55.0		0.0		144	117	209
SLC or higher	45.4	51.6	53.6	54.6	46.6	46.4		1.9		108	161	179
<b>Religion</b>												
Hindu	52.0	50.8	51.4	48.0	47.6	48.6		1.7		590	664	646
Others	34.1	50.5	40.9	65.9	46.2	59.1		3.2		170	93	186
<b>Caste ethnicity</b>												
Brahmin Chhetri	54.2	53.8	51.8	45.8	43.6	48.2		2.6		253	303	278
Janajati	36.4	48.4	40.7	63.6	49.8	59.3		1.8		332	219	351
Dalits	57.5	53.8	62.7	42.5	46.2	37.3		0.0		127	145	158
Newars	70.8	31.3	48.9	29.2	68.8	51.1		0.0		48	32	45
Madhesi caste		49.1			47.3			3.6			55	
<b>Migration status</b>												
Migrant	47.7	45.0	48.8	52.3	52.7	51.2		2.3		644	131	125
Non Migrant	50.0	51.9	49.1	50.0	46.3	50.9		1.8		116	626	707
<b>Exposure to radio and/or TV</b>												
None	60.3	52.1	44.6	39.7	45.4	55.4		2.5		262	355	139
Only one	39.0	47.7	43.8	61.0	51.4	56.2		0.9		323	325	297
Both	46.3	57.1	54.5	53.7	40.3	45.5		2.6		175	77	396
<b>SES index</b>	Ns											
Poorest	55.7	43.0	49.2	44.3	57.0	50.8		0.0		183	172	195
Second	48.1	52.5	44.5	51.9	45.6	55.5		1.9		160	160	155
Third	44.7	53.8	50.6	55.3	43.8	49.4		2.5		141	160	154
Fourth	43.1	53.1	52.4	56.9	42.6	47.6		4.3		144	162	168
Richest	46.2	52.4	48.1	53.8	47.6	51.9		0.0		132	103	160
<b>Total</b>	<b>48.0</b>	<b>50.7</b>	<b>49.0</b>	<b>52.0</b>	<b>47.4</b>	<b>51.0</b>		<b>1.8</b>		<b>760</b>	<b>757</b>	<b>832</b>

As shown in Table 5.13, over 70 % (89 % in 2011, 71 % in 2013 and 72 % in 2015) respondents who had ever used ORS said they had last used ORS it in last one year with a median of 4, 3 and 12 months.

The most frequent place where the last ORS obtained was from health post/sub-health post followed by (not in rank) FCHVs and private pharmacy. Other sources were cited by very few respondents.

**Table 5.13 Percent distribution of currently married women aged 15-49 having at least one child below 5 years of age at survey and have heard of ORS and used for children below five years of age when ORS was last given, source of supply, brand, price and ecological regions**

Description	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
<b>Time when ORS was given last time</b>									
Less than 6 months	57.3	53.9	22.5	56.2	49.8	28.1	56.4	50.8	26.8
6 to 11 months	12.0	7.9	14.1	13.1	7.8	14.0	12.9	7.8	14.1
1 year	18.7	11.2	28.2	20.3	13.2	32.3	20.0	12.8	31.4
2 year	6.7	5.6	21.1	5.2	7.1	13.2	5.5	6.8	15.0
3 year or more	1.3	2.2	8.5	1.4	2.4	5.1	1.4	2.3	5.9
4 year or more	2.7	5.6	5.6	-	5.8	7.2	0.5	5.7	6.9
DK	1.3	13.5		3.8	13.9		3.3	13.8	
Mean (in months)	7.5	10.8	16.2	6.5	12.5	13.9	6.7	12.1	14.4
Median (in months)	3.0	2	12	4.0	3	12	4.0	3.0	12
Std. Deviation	10.0	19.4	12.6	7.0	23.6	12.2	7.7	22.7	12.3
Range	0-48	0-121	1-48	0-36	0-193	1 - 54	0-48	0-193	1 - 54
<b>Source of obtaining ORS given last time</b>									
Hospital	2.7	14.6	1.9	5.9	7.8	1.0	5.2	9.4	1.2
Health Post/ Sub-health post	74.7	48.3	67.3	57.6	50.5	53.5	61.1	50.0	57.1
Private Clinic/ Nursing Home	1.3	3.4	0.0	1.4	3.1	3.7	1.4	3.1	2.7
Private Pharmacy	9.3	13.5	15.0	19.0	16.6	19.9	17.0	15.9	18.6
FCHV	12.0	19.1	13.1	15.9	21.0	21.3	15.1	20.6	19.1
Sangini outlet			0.9			0.7			0.7
Other	-			0.3			0.3		
Grocery shop		0.0			0.3			0.3	
Mobile clinic		0.0			0.3			0.3	
Neighbor		0.0			0.3			0.3	
DK		1.1	1.9		0.0	0.0		0.3	0.5
<b>Brand of ORS given last time</b>									
<i>Jeevan Jal</i>	89.3	91	79.4	81	80	82.1	82.7	82.6	81.4
<i>Nava Jeevan</i>	6.6	2.2	2.8	13.1	7.1	9.0	11.8	6	7.4
<i>Nawa Jal</i>	-	0	0.0	0.7	0.3	1.0	0.5	0.3	0.7
Relyte			0.0			1.7			1.2
Revive	-	0	0.0	0.3	0.3	1.3	0.3	0.3	1.0
<i>Sakti Jal</i>		1.1	0.0		2	2.0		1.8	1.5
<i>Jeevan Bal</i>	4	0		3.1	0.3		3.3	0.3	
Hydrate		0			0.3			0.3	
Electrobion		1.1			1			1	
Orestal		0			0.7			0.5	
DK	-	4.5	17.8	1.7	7.8	3.0	1.4	7	6.9
<b>Amount paid for one pack of ORS the last time it was obtained (in NRS)</b>									
5	1.3	0.0	0.0	1.0	0.3	0.7	1.1	0.3	0.5
7	-	0.0		1.0	1.0		0.8	0.8	
8	2.7	0.0	0.0	6.6	1.7	1.0	5.8	1.3	0.7
9		0.0			0.3			0.3	
10+	6.6	19.1	9.3	8.2	18.3	17.9	7.9	18.5	15.7
free of cost	86.7	70.8	81.3	76.2	72.5	74.8	78.4	72.1	76.5
DK	2.7	10.1	9.3	6.9	5.8	5.6	6.0	6.8	6.6
Mean	9.5	15.1	16.0	9.0	12.3	12.4	9.1	12.9	13.0
Std. Deviation	2.8	6.4	6.1	1.9	7.8	6.1	2.1	7.6	6.2
Range	5-15	10-30	10 - 30	5-15	5-60	5 40	5-15	5-60	5 40
<b>Total (n)</b>	<b>75</b>	<b>89</b>	<b>71</b>	<b>290</b>	<b>295</b>	<b>235</b>	<b>365</b>	<b>384</b>	<b>306</b>

*Jeevan Jal* was the brand used last time by most respondents (over 80 % in all three surveys) followed distantly by *Nava Jeevan*. About seven percent of respondents in 2013 and 2015 did not know what brand they used.

Almost over 72% of ORS users obtained the ORS they used last free of cost. About 16 % of respondents in 2015 said they paid NRS 10 and over for one pack of ORS. The mean price paid was respectively: NRs 9, 12 and 13 on 2011, 2013 and 2015 respectively. The high percentage of respondents receiving ORS for free indicates that it could be difficult to motivate many people to pay for ORS.

Table 5.14 presents various reasons that women with children under five never use ORS. Among the various reasons, not having diarrhea was the reason given most (over 45 %) in all three surveys. Similar pattern was observed when data was disaggregated by mountains and hill regions. 18 % in 2011 and 20 % in 2015 said that they adopted traditional method. Similarly, 13 % in 2011 and 23 % in 2015 said that they gave other medicines. Few of the respondents (below 4 % in 2015) said non-availability nearby as reason for not giving ORS to their children and about 6 % said that baby was too small to give ORS.

**Table 5.14** Percent distribution of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of ORS by reasons for never using ORS.

Reasons for never having used ORS (Multiple Response)	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
No diarrhea	40.6	46.5	63.9	45.3	55.4	57.0	44.5	52.9	59.0
Unaware of ORS treatment	4.7	1.0	5.7	2.1	1.5	0.3	2.5	1.4	1.9
Not available nearby	23.4	7.1	9.8	3.0	1.2	0.7	6.4	2.8	3.3
Given other medicine	3.1	27.3	18.9	14.3	16.9	24.8	12.5	19.8	23.1
Adopted traditional remedies	28.1	8.1	17.2	16.7	8.8	21.5	18.6	8.6	20.3
Baby is too small		8.1	4.9		5.8	6.6		6.4	6.1
No need to give	15.6	22.2		19.5	35.0		18.8	31.5	
Child recovered swiftly			2.5			0.7			1.2
Do not have children under 5 years/ Do not have any children		0.0			0.4			0.3	
The children did not like the taste		1.0			0.4			0.6	
Other±	3.1		0.8	4.0		2.6	3.8		2.1
<b>Total (n)</b>	<b>64</b>	<b>99</b>	<b>122</b>	<b>329</b>	<b>260</b>	<b>302</b>	<b>393</b>	<b>359</b>	<b>424</b>

± Other includes: consulted traditional healer.

### 5.3.4 FUTURE USE INTENTION

From table 5.15, almost all (96 to 99 % in 2011 and 2015) respondents with children under five said they intended to use ORS if the child had diarrhea in the future.

**Table 5.15** Percent distribution of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and has heard of ORS by intention to use in the future

Intention to use ORS if the child has diarrhea in the future	Mountain			Hill			Both		
	2011	2013	2015	2011	2013	2015	2011	2013	2015
Yes	100.0	97.4	99.6	95.7	98.2	99.3	96.4	98.0	99.2
No	0.0	1.0	0.0	0.6	1.6	0.5	0.5	1.5	0.7
DK	0.0	1.6	0.4	3.7	0.2	0.2	3.0	0.5	0.2
<b>Total (n)</b>	<b>139</b>	<b>193</b>	<b>229</b>	<b>621</b>	<b>564</b>	<b>603</b>	<b>760</b>	<b>757</b>	<b>832</b>

## 5.4 ZINC

### 5.4.1 AWARENESS OF PRODUCT AND EXPOSURE TO MESSAGES IN THE LAST 6 MONTHS

Table 5.16 shows the percentage distribution of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and had heard of zinc by ecological regions. Comparison is limited to two sets of data because information on zinc was not collected in the 2013 survey. The analysis reveals that awareness to zinc among mothers of children under five years of age who have one child has increased to 74 % in 2015 compared to 2011 (38%). Similar increase in the zinc awareness between 2011 and 2015 is also observed when data is disaggregated by mountain (from 26 to 66 %) and hills (from 41 to 77%).

**Table 5.16** Percent distribution of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and has heard of zinc by ecological regions

Heard of zinc by e-belt	Mountain		Hill		Both	
	2011	2013	2011	2013	2011	2013
Yes	25.5	66.7	41.0	76.8	38.0	74.0
No	74.5	33.3	59.0	23.2	62.0	26.0
<b>Total (n)</b>	<b>157</b>	<b>231</b>	<b>659</b>	<b>608</b>	<b>816</b>	<b>839</b>

Table 5.17 shows the knowledge on zinc by selected background characteristics of the respondents. The analysis reveals that mothers in hills than mountains are more likely to know about zinc. Similarly knowledge on zinc seems to have increased with the level of education and number of media exposure. Furthermore, women in higher economic status are more likely to know about zinc compared those who are in poorer wealth quintile group. The data also shows that women who are in 20-29 age groups are more likely to know about zinc compared to those who are younger or elder than them.

Religion, caste/ethnicity and migration status of the respondents did not show any pattern in relation to knowledge on zinc.

**Table 5.17** Percent distribution of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey by awareness of zinc and selected background characteristics

Background characteristics	Heard		Not Heard		Number	
	2011	2015	2011	2015	2011	2015
<b>Region of residence</b>						
Mountain	25.5	66.7	74.5	33.3	157	231
Hills	41.0	76.8	59.0	23.2	659	608
<b>Age of women (in years)</b>						
15-19	26.2	72.1	73.8	27.9	42	43
20-29	43.6	77.8	56.4	22.2	512	553
30-49	29.0	65.8	71.0	34.2	262	243
<b>Level of education</b>						
No schooling/illiterate	20.8	60.3	79.2	39.7	408	287
Some primary	40.3	68.9	59.7	31.1	154	164
Some secondary	57.9	80.9	42.1	19.1	145	209
SLC or above	72.5	92.7	27.5	7.3	109	179
<b>Religion</b>						
Hindu	37.1	76.7	62.9	23.3	631	649
Non-Hindu	41.1	64.7	58.9	35.3	185	190
<b>Caste/ethnicity</b>						
Brahmin/Chhetri	44.4	85.6	55.6	14.4	268	278
Janajati	39.8	66.9	60.2	33.1	354	356
Dalit	24.7	71.3	75.3	28.8	146	160
Newar	29.2	68.9	70.8	31.1	48	45
<b>Migration status</b>						
Non-migrant	34.3	84.9	65.7	15.1	694	126
Migrant	59.0	72.1	41.0	27.9	122	713
<b>Exposure to media</b>						
None	17.6	44.8	82.4	55.2	295	145
Only one	35.7	70.1	64.3	29.9	297	298
Only two	58.5	87.6	41.5	12.4	130	396
All three	80.9		19.1		94	
<b>SES Index</b>						
Lowest	19.4	60.2	80.6	39.8	211	201
Second	26.7	60.9	73.3	39.1	176	156
Middle	33.8	77.9	66.2	22.1	151	154
Fourth	55.9	85.1	44.1	14.9	145	168
Highest	67.7	88.8	32.3	11.3	133	160
<b>Total</b>	<b>38.0</b>	<b>74.0</b>	<b>62.0</b>	<b>26.0</b>	<b>816</b>	<b>839</b>

Table 5.18 shows the percent distributions of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and had heard of zinc in the last 6 months and source of information. Hearing or seeing to any messages or information from any source about zinc over the last 6 months was recalled by 69 % of the respondents in 2011 which increased to 85 % in 2015. Similar increase (slightly high in mountain) in the proportion of respondents was also observed when the data was disaggregated by regions.

The sources of information cited by respondents on zinc were not consistent in 2011 and 2015. However some important sources cited by respondents (not on rank order) are: Radio Television, FCHV, Health facility or health worker, Sub-health post; hospital, and Friends/relatives.

**Table 5.18 Percent distributions of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of zinc in the last 6 months and source of information**

Background characteristics	Mountain		Hill		Both	
	2011	2015	2011	2015	2011	2015
<b>Recall hearing or seeing to any messages or information from any source about zinc over the last 6 months</b>						
Yes	72.5	88.3	68.9	83.3	69.4	84.5
No	27.5	11.7	28.5	16.7	28.4	15.5
DK	0.0		2.6		2.3	
<b>Total (n)</b>	40	154	270	467	310	621
<b>Source of information about zinc in the last 6 months (Multiple Response)</b>						
Radio	58.6	62.5	60.8	75.8	60.5	72.4
Television	3.4	27.9	19.4	42.9	17.2	39.0
Newspaper/magazine	3.4	1.5	3.2	1.0	3.3	1.1
Poster/Hoarding board	0.0	2.9	3.2	6.9	2.8	5.9
Friends/relatives	55.2	9.6	26.3	15.9	30.2	14.3
FCHV	65.5	39.7	63.4	53.7	63.7	50.1
Health facility or health worker (Sub-health post; hospital)	10.3	41.9	22.0	49.4	20.5	47.4
In a shop/ Pharmacy	0.0	5.9	2.2	10.8	1.9	9.5
Neighbor	10.3	5.9	12.4	8.5	12.1	7.8
Other (training; group meeting; school; husband)	0.0	0.7	0.5	0.8	0.5	0.8
NGO		0.0		0.3		0.2
Dangler		0.0		0.3		0.2
Village health talk		2.9		3.3		3.2
Cinema hall/Theater		0.0		0.3		0.2
Do not know/ no response	0.0		0.5		0.5	
<b>Total (n)</b>	<b>29</b>	<b>136</b>	<b>186</b>	<b>389</b>	<b>215</b>	<b>525</b>

± Other includes: training; group meeting; school; husband.

Table 5.19 shows the percent distribution of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of zinc in the last 6 months by selected background characteristics.

Of the total respondents 73 % in the mountains and 88 % in the hills said that they had heard of zinc in last 6 months from at least one source. Similarly the proportion of those saying to have heard of zinc in last 6 month has also increased from 69 % to 83 % in the mountains. Between 2011 and 2015, the proportion of those getting message on zinc in mountains was slightly higher than in the hills.

Age and caste/ethnicity of the respondents do not show a clear pattern of receiving message on zinc, so do the education in 2011. However, in 2015, a clear pattern of chances on getting

message on zinc from a media among educated women was observed to be high compared to those who have lower level of education.

Non-Hindus compared to Hindus and non-migrants compared migrants had higher chances of getting message in last 6 months from a media on zinc. Similarly, those who belong to poorer groups compared to higher SES groups had lower chances of receiving message on zinc in last 6 months.

**Table 5.19 Percent distribution of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of zinc in the last 6 months and selected background characteristics**

Background characteristics	Heard		Not Heard		Do not know		Number	
	2011	2015	2011	2015	2011	2015	2011	2015
<b>Region of residence</b>								
Mountain	72.5	88.3	27.5	11.7	0.0		40	154
Hills	68.9	83.3	28.5	16.7	2.6		270	467
<b>Age of women (in years)</b>								
15-19	72.7	83.9	27.3	16.1	0.0		11	31
20-29	70.4	86.3	26.9	13.7	2.7		223	430
30-49	65.8	80.0	32.9	20.0	1.3		76	160
<b>Level of education</b>								
No schooling/illiterate	61.2	75.1	37.6	24.9	1.2		85	173
Some primary	72.6	83.2	25.8	16.8	1.6		62	113
Some secondary	73.8	89.3	21.4	10.7	4.8		84	169
SLC or above	70.9	90.4	27.8	9.6	1.3		79	166
<b>Religion</b>								
Hindu	64.5	83.1	32.9	16.9	2.6		234	498
Non-Hindu	84.2	90.2	14.5	9.8	1.3		76	123
<b>Caste/ethnicity</b>								
Brahmin/Chhetri	65.5	83.6	32.8	16.4	1.7		119	238
Janajati	80.1	88.2	19.1	11.8	0.7		141	238
Dalit	50.0	77.2	38.9	22.8	11.1		36	114
Newar	42.9	90.3	57.1	9.7	0.0		14	31
<b>Migration status</b>								
Non-migrant	70.8	93.5	27.8	6.5	1.4		72	107
Migrant	68.9	82.7	28.6	17.3	2.5		238	514
<b>Exposure to media</b>								
None	46.2	52.3	50.0	47.7	3.8		52	65
Only one	62.3	82.3	33.0	17.7	4.7		106	209
Only two	76.3	91.9	23.7	8.1	0.0		76	347
All three	88.2		11.8		0.0		76	
<b>SES Index</b>								
Lowest	46.5	75.2	51.2	24.8	2.3		43	121
Second	62.8	71.6	37.2	28.4	0.0		43	95
Middle	67.3	86.7	28.8	13.3	3.8		52	120
Fourth	76.8	89.5	19.5	10.5	3.7		82	143
Highest	77.8	94.4	21.1	5.6	1.1		90	142
<b>Total (n)</b>	<b>69.4</b>	<b>84.5</b>	<b>28.4</b>	<b>15.5</b>	<b>2.3</b>		<b>310</b>	<b>621</b>

Mountain and hills disaggregated data are not shown because of small sample size in mountain.

Table 5.20 provides results by messages on zinc seen or heard by the respondents in the last six months. Among the various messages, the two main messages cited as having been seen/heard in the last six months were “Zinc Zhada Pakhala Bagcha tadha (zinc keeps the diarrhea away)” and “Zinc tablets should be given for 10 days/ complete dose should be administered”. Other frequently cited message heard by the respondents in last 6 months were: “Zinc is the right rehydration treatment of diarrhea”, “Zinc helps in building immunity/ the risk of new episode in the future reduces”, and “Zinc reduces the duration of the diarrheal episode”. Other messages recalled by the respondents were cited by very few.

**Table 5.20 Percent distributions of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of zinc in the last 6 months by type of information seen/heard.**

Type of information seen/heard about zinc in the last 6 months (Multiple Response)	2011	2015
Zinc Zhada Pakhala Bagcha tadha (zinc keeps the diarrhea away)	57.7	45.1
Zinc is the right rehydration treatment of diarrhea	32.1	46.7
Zinc tablets should be given for 10 days/ complete dose should be administered	57.2	55.0
Zinc helps in building immunity/ the risk of new episode in the future reduces	27.4	9.0
Zinc reduces the duration of the diarrheal episode	20.9	9.5
Hand washing with soap	11.2	7.2
Should not give stale food	1.9	3.8
Give boiled water and sugar-salt solution	3.3	4.2
Zinc should be used along with ORS/ Zinc with ORS cures faster	13.0	16.8
Jhada Pakhala ko upachar Zinc chakki ko prayog (use of zinc tablet for the treatment of diarrhea)	4.7	10.3
Treating drinking water	0.9	4.0
Punerjaliya Jhol Banaune Tarika		3.4
Punerjaliya Jhol Khuwaune Tarika		3.8
Zinc Chakki Ka Faída Haru		2.3
Zinc Chakki Khuwaye Das Din Lagatar Pakhala Rokincha, Hudaina Barambar		4.2
Other (provide one tablet of zinc every day)		0.4
Give plenty of liquid to child with diarrhea	4.2	
Give ORS	1.9	
Do not know/no response	9.3	
<b>Total</b>	<b>215</b>	<b>525</b>

Mountain and hills disaggregated data are not shown because of small sample size in mountain.

#### 5.4.2 BRAND AWARENESS AND SOURCES OF SUPPLY

Table 5.21 shows that the zinc brand awareness among the currently married women aged 15-49 having at least one child below 5 years of age at the time of survey was found to be very low in both the 2011 and the 2015 surveys. 81 % in 2011 and 94 % in 2015, even after probing, said that they are not familiar with any brand name of zinc.

**Table 5.21 Percent distributions of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of zinc by brand**

Recall of brand names for zinc (Multiple Response)	Spontaneous		After probing	
	2011	2015	2011	2015
Z-DIS 10	7.7	1.0	11.6	1.9
Z-DIS 20	4.2	0.6	4.2	1.8
Zinc-DT 10	2.6	0.5	2.9	1.6
Zinc-DT 20	0.6	1.8	1.3	1.8
ZINCOVA-20	3.2	0.3	3.2	0.3
ZN-DT	1.0		1.0	0.5
ZN-DT 10	0.6		0.6	
ZINEP DT 10				0.3
ZINEP DT 20				0.3
Do not know	84.8	96.9	81.3	94.4
<b>Total</b>	<b>310</b>	<b>621</b>	<b>310</b>	<b>621</b>

The major source of zinc among those who have heard of zinc in 2011 was pharmacy followed by health post while it was health post followed by pharmacy in 2015. The other sources of information on zinc in both surveys were, respectively FCHV, followed by Government hospital/clinic, and Hub-health posts. The remaining sources was cited by very few of the respondents (table 5.22).

**Table 5.22 Percent distributions of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of zinc by information about the source of its supply and ecological regions**

Knowledge about places to get/buy zinc [MR]	Mountain		Hills		Both	
	2011	2015	2011	2015	2011	2015
<b><u>Public sector</u></b>						
Health post	60.0	72.7	54.1	69.4	54.8	70.2
FCHV	32.5	44.2	41.9	53.7	40.6	51.4
Government hospital/clinic	37.5	27.9	28.5	32.8	29.7	31.6
Sub-health post	12.5	5.8	17.8	33.8	17.1	26.9
PHC center	7.5	19.5	5.6	7.1	5.8	10.1
PHC outreach	2.5	13.6	0.4	4.1	0.6	6.4
Other government	2.5	1.3	-	0.4	0.3	0.6
Mobile clinic		0.0		0.4		0.3
<b><u>Private medical sector</u></b>						
Pharmacy	55.0	41.6	60.0	57.8	59.4	53.8
Private hospital/clinic	22.5	3.9	13.7	19.1	14.8	15.3
Sangini outlet	-	0.0	0.7	2.6	0.6	1.9
<b><u>NGO sector</u></b>						
FPAN		0.0		0.2		0.2
Marie Stopes		0.0		0.2		0.2
<b><u>Other source</u></b>						
Shop	-	0.0	1.1	0.6	1.0	0.5
Friend/relative		0.0		0.4		0.3
Do not know/no answer	2.5	3.2	2.6	1.3	2.6	1.8
<b>Total</b>	<b>40</b>	<b>154</b>	<b>270</b>	<b>467</b>	<b>310</b>	<b>621</b>

### 5.4.3 USE OF PRODUCT

Table 5.23 shows the percent of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of zinc by ever given zinc and selected background characteristics. The result reveals that women aged 20-29 were more likely to give zinc to their child compared to women who were younger or older. Similarly, Hindus compared to non-Hindus were more likely to give zinc to their baby.

**Table 5.23 Percent distribution of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of zinc by ever given zinc and selected background characteristics**

Background characteristics	Yes		No		Number	
	2011	2015	2011	2015	2011	2015
<b>Age of women (in years)</b>						
15-19	18.2	22.6	81.8	77.4	11	31
20-29	39.9	24.4	60.1	75.6	223	430
30-49	32.9	20.6	67.1	79.4	76	160
<b>Level of education</b>						
No schooling/illiterate	41.2	28.3	58.8	71.7	85	173
Some primary	38.7	24.8	61.3	75.2	62	113
Some secondary	32.1	17.2	67.9	82.8	84	169
SLC or above	38.0	23.5	62.0	76.5	79	166
<b>Religion</b>						
Hindu	42.3	27.1	57.7	72.9	234	498
Non-Hindu	22.4	8.1	77.6	91.9	76	123
<b>Caste/ethnicity</b>						
Hill Brahmin/Chhetri	45.4	24.8	54.6	75.2	119	238
Hill Janajati	28.4	16.0	71.6	84.0	141	114
Hill Dalit	41.7	38.6	58.3	61.4	36	238
Newar	50.0	12.9	50.0	87.1	14	31
<b>Migration status</b>						
Non-migrant	37.8	19.6	62.2	80.4	238	107
Migrant	36.1	24.1	63.9	75.9	72	514
<b>Exposure to media</b>						
None	57.7	35.4	42.3	64.6	52	65
Only one	25.5	22.5	74.5	77.5	106	209
Only two	40.8	21.6	59.2	78.4	76	347
All three	36.8		63.2		76	
<b>SES Index</b>						
Lowest	39.0	28.9	61.0	71.1	41	121
Second	46.8	24.2	53.2	75.8	47	95
Middle	35.3	21.7	64.7	78.3	51	120
Fourth	34.6	22.4	65.4	77.6	81	143
Highest	35.6	20.4	64.4	79.6	90	142
<b>Total</b>	<b>37.4</b>	<b>23.3</b>	<b>62.6</b>	<b>76.7</b>	<b>310</b>	<b>621</b>

\*Significant at <.05 level

ns= Not significant

For other variables considered in the table, no clear pattern of relationship was observed with chances of zinc use. Besides, a strange relation is observed between the chances of giving zinc

and mother's exposure to media, where the result shows that those who are not exposed to a media are more likely to give zinc to their baby compared to those who are exposed to one or two types of media, and is not explained clearly by the analysis.

Table 5.24 shows the Percent of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and had heard of zinc and use including source of supply, brand of zinc and cost.

**Table 5.24 Percent distribution of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and has heard of zinc and use including source of supply, brand of zinc and cost**

Description	Percent (n=116) 2011	Percent (n=145) 2015
<b>Last time zinc was given</b>		
Less than 6 months	54.3	23.4
6-11 months	23.3	10.3
1 year	18.1	20.7
2 years	2.6	11.7
3 years	1.7	1.4
4 + years		32.4
Do not know	1.7	0.0
<b>Mean (month)</b>	<b>5.4</b>	11.3
<b>Median (month)</b>	<b>3.50</b>	12.0
<b>SD</b>	<b>5.2</b>	11.0
<b>Range</b>	<b>0-24</b>	1-59
<b>Places of obtaining zinc given in last time</b>		
Health Post/ Sub-health post/PHC	50.9	55.2
FCHV	24.1	31.7
Private Pharmacy	16.4	10.3
Hospital	7.8	1.4
Private clinic/ nursing home	0.9	1.4
<b>Amount paid for the 10 –day dose of zinc the last time it was obtained (in NRs)</b>		
20	1.7	6.2
25	1.7	0.7
30	3.4	1.4
97= Free of cost	77.6	86.9
98= Do not know	15.5	4.8
Mean (SD)	26.3 (4.4)	22.1 (3.96)
Range	20-30	20-30

Majority of the women in both surveys who had given zinc for the last time was less than 6 months (54 % in 2011 and 23 % in 2015). However, half of the women in 2011 gave zinc for the last time in 3 and half month before the 2011 survey while half of women in 2015 gave zinc for the last time was 11 months before the 2015 survey. In both surveys the zinc given

last time was obtained from Health Post/ Sub-health post/PHC followed by FCHVs, Private Pharmacy, Hospital and Private clinic/ nursing home (Table 5.24).

With respect to the price paid, majority of the respondents (78 % in 2011 and 87 % in 2015) said that they got it free of cost.

Table 5.25 shows percent of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and had heard of zinc and never used by reasons for not using.

The major reason for not using zinc was “no diarrhea” in both 2011 and 2015. The other reasons across surveys are not consistent. However, some of the major reasons for not giving zinc (not in rank order) are: “No need”, followed by “Other medicine was given”, “Giving ORS/ ORS is enough” and “Did not have Zinc”.

**Table 5.25 Percent distribution of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of zinc and never used by reasons for not using**

Reasons for never use of zinc (Multiple Response)	2011	2015
No diarrhea	36.8	36.8
No need	29.5	
Did not know it should be given with ORS/ thinking that ORS alone was fine	13.5	
Did not have Zinc	10.4	4.7
Other medicine was given	6.2	30.7
Do not think Zinc is effective	3.1	0.8
Gave ORS/ ORS is enough	6.2	19.9
Other±	3.6	
Unaware of Zinc treatment		15.2
Not available nearby		2.5
Adopted traditional remedies		16.1
Baby is too small		3.8
Other (child recovered swiftly without use of any medicine/ consulted traditional healer/ not given from the health facility)		1.7
<b>Total</b>	<b>193</b>	<b>473</b>

± Other includes: health worker did not prescribe; did not like to take or give tablets; used traditional remedies; baby was too small.

#### 5.4.4 FUTURE USE INTENTION AND WILLINGNESS TO PAY

Table 5.26 shows percent of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of zinc by intention to use it during diarrhea of their child in the future including price they will be willing to pay for it.

The analysis shows that over 97 % of the respondents said that they intended to use Zinc in future if their child gets diarrhea. 95 in 2011 and 73 % in 2015 said that they will purchase a 10 dose of Zinc tablets at Rs 25 and 20 respectively. The median price the women are ready to pay for 10 tablet dose of zinc at NRs 33 in 2011 and at NRs 22 in 2015 (Table 5.26).

**Table 5.26** Percent distributions of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and have heard of zinc by intention to use it during diarrhea of their child in the future including price they will be willing to pay for it

Description	2011	2015
<b>Intention to use zinc if any child has diarrhea in the future</b>		
Yes	97.4	98.4
No	0.3	0.6
Do not know	2.3	1.0
<b>Total</b>	<b>310</b>	621
<b>Willingness to buy 10 dose of ZINC at a price of Rs 25 (NRS 20 in 2015)</b>		
Yes	98.7	73.1
No	0.7	26.9
Do not know	0.7	
<b>Total</b>	<b>302</b>	<b>609</b>
<b>The maximum price willing to pay for a pack of 10-tablet zinc (in NRs)</b>		
Less than 29	4.6	71.3
Rs 30	61.6	20.5
Rs 31 or more	22.5	8.2
<b>Mean (SD)</b>	<b>32.7 (4.0)</b>	<b>22.9 (9.1)</b>
<b>Range</b>	<b>25-50</b>	5-50
Do not know	11.3	
<b>Total</b>	<b>302</b>	<b>609</b>

## 5.5 ATTITUDES TOWARDS ZINC AND ORS

The studies tried to get insight into the attitudes of the married women with children under 5 towards diarrhea, zinc and ORS. For this purpose respondents were presented with 16 statements in 2911 and 15 in 2015, both negative and positive, and asked whether they agree or disagree. The responses to those statements were given a numerical value +1 (for agree), 0 (for neither agree or disagree or don't know) or -1 (for disagree) to calculate a composite index. The survey results are presented in Table 5.27.

The women had very strong beliefs related to four of the six statements regarding diarrhea, most agreeing with three - diarrhea can be caused by drinking unsafe water, children can die from diarrhea (in 2011), and hand washing with soap can reduce chances of diarrhea) in both 2011 and 2015) - and disagreeing with If my child gets diarrhea it is best just to do nothing and it will pass in time (in both 2011 and 2015). These responses demonstrate positive attitudes related to cause of and ways to prevent diarrhea, as well as its seriousness and need for treatment. On average, beliefs were much weaker for the other two statements; with more agreeing that I rely on my health provider/pharmacist to give the correct treatment for my child's diarrhea and more disagreeing that most diarrhea can be managed at home without any drugs (the statement is not available for 2015). The results of these two seem contradictory.

There was a high overall agreement with the beliefs that *ORS is an effective rehydration treatment* and *I know how to prepare ORS*. There was also relatively high overall disagreement with the statement that *ORS does not stop diarrhea (none of the three statements are available for 2015)*, indicating that respondents may not distinguish much between dehydration and diarrhea itself. There was weak overall agreement with the statement that “*shops nearby here always have ORS for sale*”, indicating either an actual or perceived availability issue.

**Table 5.27 Mean ratings of the degree of agreement among currently married women aged 15-49 having at least one child below 5 years of age at the time of survey on aspects of diarrhea, ORS and zinc by ecological regions**

Description	Mountain		Hills		Total	
	2011 (n=157)	2015	2011 (n=659)	2015	2011 (n=816)	2015
<b>Regarding diarrhea</b>						
Diarrhea can be caused by drinking unsafe water	0.962		0.961		0.961	
Children can die from diarrhea	0.917		0.939		0.935	
Hand washing with soap can reduce chances of diarrhea	0.981	0.970	0.968	0.960	0.971	0.970
I rely on my health provider/pharmacist to give the correct treatment for my child's diarrhea	0.478	0.610	0.226	0.380	0.275	0.440
Most diarrhea can be managed at home without any drugs	-0.236		-0.313		-0.298	
If my child gets diarrhea it is best just to do nothing and it will pass in time	-0.796	-	-0.765	-0.850	-0.771	-0.870
My child doesn't like ORS		-		-0.050		-0.050
		0.040				
<b>Regarding zinc</b>						
There is a place nearby where I can get Zinc when my child needs it	0.076	0.20	0.231	0.530	0.201	0.440
Zinc is the most appropriate treatment for diarrhea	0.223	0.920	0.285	0.920	0.273	0.920
Zinc should be given along with ORS/ORT to be most effective.	0.223	0.550	0.270	0.670	0.261	0.640
I am willing to pay the current price for Zinc	0.217		0.351		0.325	
If you give ORS, you do not need to give Zinc	-0.140		-0.134		-0.135	
My child won't take Zinc because it tastes bad ±	-0.475		-0.189		-0.226	
		-		-0.460		-0.430
If you give ORS, you don't need to give Zinc too		0.350				
Zinc reduces the risk of a new diarrheal episode in the following 2 to 3 months		0.230		0.530		0.440
Zinc reduces the duration of a diarrheal episode		0.470		0.650		0.600
		-		-0.630		-0.590
Zinc does not reduce the severity of a diarrheal episode		0.450				
It is too difficult to remember to give a child Zinc when the diarrhea has stopped		0.140		-0.060		-0.010
Zinc should be given for 10 consecutive days		0.550		0.720		0.670
<b>Regarding ORS</b>						
ORS is an effective rehydration treatment	0.847		0.845		0.846	
I know how to prepare ORS	0.733		0.836		0.816	
Shops nearby here always have ORS for sale	-0.096	0.000	0.214	0.240	0.154	0.170
ORS does not stop diarrhea	-0.624		-0.674		-0.664	
I know how to prepare ORS		0.650		0.760		0.730

± Denominator those who were aware of zinc (n=40 in mountain, 270 in hills and 310 total); +1 equals agree, -1 equals disagree

In 2015 compared to 2011, three statements related to zinc that had fairly agreements were: *Zinc is the most appropriate treatment for diarrhea, Zinc should be given along with ORS/ORT to be most effective and there is a place nearby where I can get Zinc when my child needs it*. Furthermore, some additional statements related to zinc only in 2015 that also showed fair agreements were: *Zinc reduces the risk of a new diarrheal episode in the following 2 to 3*

months and Zinc reduces the duration of a diarrheal episode. Similarly, the statement with disagreement (only available in 2015) was *zinc does not reduce the severity of a diarrheal episode* (Table 5.27).

## 5.6 EXPOSURE TO BCC INTERVENTION AND COMPLIANCE TO ZINC

### 5.6.1 EXPOSURE TO BCC INTERVENTION

Four different types of BCC intervention were launched by GGMS in the program area. Various media and promotional materials such as: key chains, posters, radio Jingles and TVC were used to communicate about use and compliance of zinc and its health benefit to children in saving from repetitive diarrheal episodes.

This study aimed to assess the extent of exposure of various zinc promotional messages among the respondents and its effect on zinc compliance.

The analysis reveals that majority of the respondents were exposed to posters followed by radio jingles, TVC and key chain. 21 % of the respondents were exposed to none of the four mediums, while 79 % were exposed to at least one medium, 54 % to at least two mediums, 30 % to at least three mediums and 5 % to all mediums (Table 5.28).

**Table 5.28 Percentage of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey reached by various Zinc related BCC campaign, by ecological regions**

Type of BCC campaign	2015		
	Mountain	Hill	Both
Key Chain	34.2	14.3	19.8
Poster	76.6	63.7	67.2
Radio Jingle	42.0	56.7	52.7
TVC	14.3	32.7	27.7
Number of BCC types exposed			
None	17.7	22.7	21.3
At least 1	82.3	77.3	78.7
At least 2	55.8	53.3	54.0
At least 3	24.7	32.1	30.0
All 4	4.3	4.8	4.6
<b>Total (n)</b>	<b>231</b>	<b>608</b>	<b>839</b>

## 5.6.2 ZINC COMPLIANCE: 1ST CHILD

Among those who gave zinc to their most recent child in the last episode of diarrhea, 17 % said that they gave half tablet (10 mg) a day while remaining 84 % says that they gave one full tablet (20 mg) a day.

10 mg zinc is recommended to children who are between 2 months and five months. For those who are above 5 months, 20 mg zinc is recommended, which here is denoted by one tablet. In both cases, it is recommended to give one tablet of zinc for 10 days despite whether the child continues to have diarrhea or not.

**Table 5.29 Percentage of currently married women aged 15-49 having at least one child below 5 years of age at the time of survey and use of zinc by ecological regions**

Number of zinc tablet given to baby in a day	2015		
	Mountain	Hill	Both
Half tablet	16.7	16.5	16.5
Whole tablet	83.3	83.5	83.5
Total (n)	30	79	109
<b>Number of days Zinc given to the child</b>			
2	13.3	2.5	5.5
3	6.7	11.4	10.1
4	6.7	6.3	6.4
5	16.7	8.9	11.0
6	3.3	1.3	1.8
7	3.3	1.3	1.8
9	0.0	1.3	0.9
10	50.0	67.1	62.4
<b>Total (n)</b>	<b>30</b>	<b>79</b>	<b>109</b>
<b>Reasons for not giving Zinc for 10 days</b>			
Child was cured	46.7	73.1	63.4
Child would not take Zinc treatment	20.0	19.2	19.5
Child vomited treatment	13.3	11.5	12.2
Did not purchase full course of Zinc	6.7	0.0	2.4
No one told me to give all the treatment	13.3	3.8	7.3
Child still taking the treatment	6.7	3.8	4.9
Other (busy at work/ had given medicine for fever/ forgot)	20.0	0.0	7.3
<b>Total (n)</b>	<b>15</b>	<b>26</b>	<b>41</b>

The second panel of the table shows that only 62 % of the zinc users have complied with the recommended dose of 10 tablets for 10 days. The compliance to zinc treatment was even lower to 30 % in mountains than 79 % in hills.

The Four major reasons for non-compliance cited by respondents were, child was cured (63%) followed by child would not take zinc treatment (20 %), child vomited and no one told me to give all the treatment.

## CHAPTER 6: SUMMARY

### 6.1 INTRODUCTION AND SOCIO-DEMOGRAPHIC INFORMATION

Some challenges the Government of Nepal (GON) faces today in the health sector are high child and maternal mortality rates, low prevalence of contraceptive use, limited access to reproductive health services and the emerging threat of HIV infections. Considering the extent of health issues to be addressed and increasing demand for health services, the Government of Nepal has involved the private sector in delivery of health services, including preventive public health services. The Nepal CRS Company, established in 1978 by USAID, has employed a social marketing approach to expand usage of contraceptive products such as condoms, oral and injectable contraceptives, as well as ORS and other MCH products.

USAID's Healthy Homes or *Ghar Ghar Ma Swasthya (GGMS)* Project (2010-2015) initiative consists of two components: 1) funding CRS for social marketing activities, focusing on sustainability through commercial marketing in the urban areas and promoting subsidized products in the rural, hard-to-reach areas and 2) support FHI 360 to assist CRS to develop and implement marketing plans and design and implement generic behavioral change communication (BCC) activities as directed by USAID.

The GGMS Project aims to increase the use of high-quality FP, RH and MCH products and services in 49 hill and mountain districts through private sector distribution, contributing to the Government's efforts to reduce the number of unwanted pregnancies and to improve maternal and child health.

To monitor the GGMS program effort in order to examine the program performance and to identify gaps where program can put further effort to close the gaps through its intervention for improvement of the outcomes. Three rounds (baseline, mid-line and end-line surveys) on Knowledge, attitude, and practice (KAP) on family planning and maternal health were proposed for the program districts to be conducted during the five-year project period.

Accordingly, a baseline survey of Knowledge, Attitude and Practices (KAP) among women of reproductive age (15-49 years) on contraception, reproductive health, maternal and child health, water disinfection and menstrual hygiene behaviors and related health products was designed by the FHI 360 research team and was implemented through the local research agency. Data collection field work was conducted between July and August 2011.

Similarly the Mid-line study was designed by the FHI 360 research team and was implemented through a local research agency. The data collection of the mid-line was conducted between June and July, 2013.

Finally, the end-line study again was designed by FHI 360 research team and was implemented through the local research agency. The data collection of the end-line was conducted between March and April, 2015.

In each round of the study, thorough training was given to the enumerators and supervisors focusing on the GGMS project, the research objectives, study design, sampling strategy, questionnaire, informed consent, research ethics and good field practices.

All three surveys used stratified probability sampling design for which a three stage stratified cluster sampling was employed including selection of clusters (primary sampling units or PSUs), households and individuals. The study covered both the mountain and hill strata of all five development regions. Information required for the study was collected using quantitative techniques, an interviewer –administered questionnaire. The study population represented 49 ‘hard-to-reach’ districts covered by GGMS Project.

The population for the baseline constituted 1400 currently married and 400 single women of reproductive age between 15-49 years of age in the 49 ‘hard-to-reach’ hills and mountain districts. Unmarried women were also included in the sample because the information on menstrual hygiene was also applicable for this group. Surveys of 2013 and 2015 did not have menstrual hygiene module, thus unmarried women were excluded from the sample. Therefore, a representative sample of 1620 currently married women between 15-49 years of age in 49 ‘hard-to-reach’ hill and mountain districts of Nepal were randomly selected for both the mid- and end-line studies.

## **6.2 SOCIO-DEMOGRAPHIC INFORMATION**

Majority of respondents in all three surveys were 30 to 49 years old, followed by aged 20 to 29 years and aged 15-19 years. The mean age was 29-31 years and the median was about 30 years. Respondents in the mountains were more likely to be younger than those in the hills.

In 2013, ‘Brahmin/Chhetri’ was the dominant ethnic group. In the mountains, respondents were somewhat more likely to be Brahmin/Chhetri and less likely to be Janajati. In 2011 and 2015 this Janjati was dominant in mountains followed by Brahmin/Chhetris. Similarly, the age distribution of 2015 population was closer to 2011 population than 2013.

The vast majority of the respondents, in all three surveys followed Hindu religion. Respondents from the mountains were more likely to be Buddhist compared with hills

The level of women’s literacy in 2011 was lower than in 2015. Literacy of women in mountains was lower than hills. However, the level of education of women was higher in mountains than in hills.

Almost all respondents were either housewives/home workers or farmers/herders, with mountain respondents in reverse order (more farmer/herder and less housewife/home maker). Most of the rest were self-employed or in retail sales

The great majority of respondents lived in the same district indicating a highly stable population.

### **6.3 HOUSEHOLD AND ECONOMIC CHARACTERISTICS**

The socio economic status (SES) index shows that more poor live in mountains than in hills. Possession of telephone, radio, electricity and other household items like *dhiki* and *Janto* were more in the hills than in the mountains.

The most common source of drinking water was public tap/standpipe, followed by water piped to yard protected spring, lake/pond/etc., protected/unprotected spring, and piped into the house. Very small proportion of the respondents obtained water from a stone tap/dhara.

In 2013, the most common types of sanitation used by households were: Flush to septic tank, Pit latrine with slab, no facility/bush/field and flush to pit latrine. Results were different in 2011 and 2015, where the one most used toilet facilities were ventilated improved pit latrine. Proportion of those who had no-facility/bush/field in 2015 was remarkably low compared to 2011 and 2013.

The great majority of respondents used wood for cooking, followed by LPG. Use of biogas for cooking was confined to hills. Majority used a *chulo*, followed by open fire in mountain and LPG stove in hills for cooking food. Majority had a separate room used for the kitchen in both mountains and hills.

Earth and/or mud were the most common flooring material used in the households followed by cement. Stone with mud was predominantly used for walls, followed by cement.

### **6.4 MEDIA EXPOSURE AND HABITS**

Proportion of women listening to radio over time is increasing. Although, radio had overall higher weekly exposure than TV, both media were less used in the mountain than in the hills. Those who said to listen to radio every day were smaller in mountains compared to hills, and were consistent in all three surveys.

Proportions of women listening to radio every day is increasing while lower percentage of women never listening to radio is decreasing.

Most popular radio station in 2013 was Radio Nepal (National station) followed by Shri Nagar FM (local station) and Radio Bheri FM (Local station). However, in 2015, the most three popular radio stations were Radio Nepal (National station) followed by Radio Bheri and radio

Rolpa (local stations). In general the proportion of women listening to radio at home has declined over time. Another place where people cited to listen to radio were either friend's relative house or work place.

Lok Lahari was the most popular radio program in 2011 while it was news in 2015. In general, News, Lok Lahar, Lok Bhaka/ Lok Geet/ Lok Mala, Sathi sanga man ka kura (chatting with my best friends) and Folk Songs were the top five popular radio programs (not in rank order).

The vast majority of respondents did not watch television at all more so in mountains than in hills. Women watching TV daily is increasing over time but decreasing in mountains.

Virtually about two-third television viewers watched television at home, but some watched it at relatives/friends/parents' house.

Nepal TV was still the most watched channel though its popularity is decreasing over time. However, the popularity of Kantipur TV increasing in recent years in hills.

The most popular TV program was Meri Basai. *Meri Bassai* although remains to be the most popular program in the hills, news appears to be most popular TV program in Mountain followed by *Meri Bassai*. The next popular TV program was *Tito Satya*.

Overall, access/exposure to media among people living in hard to reach districts between 2011 and 2015 has increased.

## **6.5 MARRIAGE AND FERTILITY AND OPINIONS ON NUMBER AND SPACING OF CHILDREN**

Marriage occurs relatively early in Nepal. The median age at first marriage was 17 in both 2011 and 2015 indicating that age at marriage in Nepal between 2011 and 2015 has remain almost constant.

Almost all have been pregnant at some point given birth. The average number of children born shows a slight decline indicating decline in fertility. Since, the mean CEB in mountains between 2011 and 2015 remains constant, and this figure for hills shows a decline, the decline in overall fertility in the hard to reach district can be attributed to the decline observed in the hills.

The research indicated that there is unmet need for limiting and spacing.

Most of the respondents believed that that ideal number of children to be two and the ideal spacing between births to be five years.

Injectable was the most mentioned as the best way to space births. This was followed by implants, OCP and IUD.

## 6.6 KNOWLEDGE OF AND USE OF CONTRACEPTION

Virtually all knew at least one modern contraceptive method in recent past and 99 % knew at least three methods. Besides, knowledge of family planning for each method among women in hills is higher than that of mountains.

Ever use of a family planning has increased from 61% to 70 % between 2011 and 2015. Injectable was the most widely ever used modern method followed by pills and condoms, irrespective of whether it was in the mountain or hills.

One interesting observation is that those ever used female sterilization has slight decreased and those ever used male sterilization has slightly increased. This pattern is consistent in both mountain and hills.

Current modern contraceptive use (CPR) has declined from 45 % to 39 % between 2011 and 2015. So do any method use in the same period has declined from 50 % to 48 %. Similar pattern of decline in CPR is also observed for mountains and hills.

Among the current contraceptive methods, injectables remain to be popular method in both mountains and hills. This was followed by male sterilization and pills.

The reason given by the most former-users and never users of contraception for not using contraception was not consistent across the surveys. However, some of the major reasons based on their responses (not in rank order) are: husband away from home or stays outside, Health concerns, fear side effects, infrequent sex and menopausal/hysterectomy.

Modern method users were more likely to be either in 35-44 or in the 25-34 age groups than in the younger or older groups. However, injectable users were more likely to be in the 25-34 age groups than in other age groups. Majority of the modern method users were more likely to have no schooling or primary education. While Hindus were more likely to use modern methods, non-Hindus were more likely to be injectable users than Hindus were. Injectable users were more likely to be Newars and least likely to be Dalits. Percentage of non-migrants who were using injectables was somewhat higher than that of migrants. Non-migrants were more likely to use modern methods than migrants.

Almost all current users said their husband was in favor of using their current method. In all three surveys, the government sector (hospitals or health posts) were the major source of first contraceptives. This was followed by private sector, primarily pharmacies and private hospitals/clinics. Proportion obtaining first FP method from NGO is declining in recent past.

The percent of respondents informed by providers about the possible side effects from the use of current methods the first time they obtained is increasing in recent past. Majority of them were informed about what to do if they experienced side effects. Similar results are observed when disaggregated by mountains and hills.

Information received on possible side effects of current method among respondents in all surveys varied by method used, with those using condoms and male sterilization were relatively lower (most likely because their husband was the actual client) and implant the highest.

## **6.7 CURRENT METHOD – SATISFACTION AND REASONS**

Three-fourths of current users in all surveys were very satisfied, with a higher proportion in mountains than in hills. Most of the rest were somewhat satisfied and few not satisfied.

The majority of respondents who said they were very satisfied with their current method said it was because they thought the current method was effective. Other reasons given for being very satisfied by a significant number of current users were “*no side effects, service center near*”, and “*easy to take*”.

The reason given by almost all those who were not satisfied was ‘*side effect(s)*’ followed by “*service center too far*” and “*ineffective*”.

The three major reasons given by most users for satisfaction with regard to three temporary methods (injectables, pills, and condoms) were: *effective, no side effects and easy to take*. *Effectiveness* and *no side effects* were also among the top three reasons given for satisfaction with male and female sterilization, other being *nearness of service center*, which was also the fourth highest reason given for satisfaction with injectables.

The reason for currently using a contraceptive is not consistent over the years. The top five reasons (not ranked) for choosing current contraceptives are: *very effective to prevent pregnancy, safe/few side effects, easy to use, disliked other methods, and, recommended by husband*.

## **6.8 FIRST CONTRACEPTIVE METHOD USE, AMONG CURRENTLY MARRIED WOMEN OF REPRODUCTIVE AGE WHO EVER USED CONTRACEPTION**

The median age at which the respondents used a contraceptive method for the first time was 23 years. Majority of the respondents were in between ‘20-24 years’ when they first used a contraceptive followed by those being between ‘25-29 years’ and 15-19 years of age.

Almost half of the total respondents in all surveys reported injectable contraceptive was the first method used. This was followed by Pills and Condoms. In the mountains use of injectable as first method was higher than in hills. About ten percent said the first method they used was a permanent one.

The median age of the youngest child was increasing from 8 months to 12 months. Majority also said that their child was less than one year when they first used contraceptive.

## 6.9 FUTURE INTENTIONS REGARDING CHILDREN AND USE OF CONTRACEPTIVES

Most of those who were not using contraceptives because they would like to have another child. The percentage of respondents wanting to have children in the future was higher in the mountains than in the hills but was reversed in recent past.

More respondents aged between '15-19 years' said they wanted to have children in the future, compared to those in 20-29 years and few in '30-39' years. This is probably because younger women have fewer children.

Majority of those who wanted to have more children in future said that they would like to become pregnant again after more than 2 years followed by after 1-2 years and in the next 3-6 months.

Major of those in those in the mountains said who were not using a permanent method said they intended to use a method in future and this trend is increasing in recent past. This shows that intention to use a FP method in future among the currently married women in the hard to reach district is increasing.

Among the different methods for future use, injectable was most often cited in all surveys. Other methods such as male sterilization, implants and pills were mentioned by few.

Among those who were not currently using a method, majority in each surveys intended to use injectables followed by sterilization and pills. Similarly, over half of injectable users intend to continue using injectables and few said to switch to either male or female sterilization. Similarly almost half of pill users said they would continue with pills. Among current condom users, less than half said they'd continue with condoms.

The reasons for not intending to use any modern method in future are not consistent across three surveys. However, some of the important reasons based on their responses (not in rank order) are: *husband away from home or stays outside, health concerns, fear side effects, infrequent sex and menopausal/hysterectomy.*

## 6.10 ATTITUDES TOWARD CONTRACEPTION

Most respondents agreed with the statement "*If you stop using a contraceptive method, you can get pregnant again*". It appears that family members talked about and had an influence on women's contraception use. There was relatively high disagreement with "*Oral contraceptive pills have more side effects than other contraceptives*" indicating that most of the people did not think that oral contraceptive had more side effects than other methods.

## 6.11 INJECTABLES

Injectables were the most popular method irrespective of ever used, current use and future use. Over half of the respondents said they heard or saw any messages or information about injectables in the last six months which is increasing in recent past.

Radio was the most popular source cited for source of information about injectables in the last six months, followed by FCHVs, health workers/health facility, and Friends/Relatives television. Information on injectables was received more often from radio and less often from the TV among respondents in the mountains compared to those in the hills.

Great majority spontaneously recalled the name Depo-Provera and about half recalled Sangini brand injectable. Proportion recalling both Sangini and Depo-Provera is decreasing over the years.

The place to obtain injectables cited by most respondents was health post, followed distantly by government hospital/clinic and pharmacy. The same pattern is observed for both in mountains and hills. "Sangini outlet" as place to obtain injectable was cited by very few. Proportion cited as place to obtain injectables from private hospital/clinic is decreasing in recent past. There was minimal mention of any NGO sources.

The advantage cited most often for injectables was *'it can be discontinued if they desired to have another child'*, followed by *'easy to use'* and *'effective method'*. About one-fifth of total respondent did not know a benefit of using injectables. *"Many side effects"* was main disadvantage cited.

Among the statements related to injectables, most respondents agreed with the statement *"Injectables are easier to use than other contraceptives"*, but generally disagreed with the statement *"I am afraid to take injections in the pharmacy, since others might see me"*.

There were lower levels of agreement with the statement *"injections can make you gain weight"* and disagreement with the statement *"children born by a woman who use injections can have many things wrong with them."*

Majority cited Depo-Provera most often in mountains and hills followed by Sangini, the CRS brand. Similarly, the great majority of injectable users said they received the injectable free of cost last time. Among users who paid for their injectable the last time, the price they paid ranged from NRs 30-60. Among those intending to use injectables, said that they were willing to buy a dose of injectable at a price of NRs. 45.

Great majority of current injectable users were very satisfied with it which is increasing in recent past. Few of the current injectable users were dissatisfied with it. The three most cited reasons for satisfaction (very and somewhat) were: *effective, easy to take, no side effects*. The reason for dissatisfaction or somewhat satisfied was *'side effects'*.

The most frequent reasons among current users for using injectables were, '*confirm for three months*', and '*very effective to prevent pregnancy*'. Other reasons cited were "*easy to use*" '*recommended by husband*', and '*desire for no more children*'.

## 6.12 CONDOMS

Knowledge on condoms increasing over the time so does ever use of condoms. However, current use remains almost constant and only few said they intended to use condoms in future.

Condom users hearing or seeing information on condoms is increasing over the time. The most popular source for messages or information about condoms in the last six months was radio. Other sources of information were (not on rank order) FCHV, friends/relatives, neighbors, Health workers/Health facility and TV.

The most frequently recalled messages were "*use of condom can prevent from disease or STI or HIV*", and "*Surachit ra bhar-pardo [Safe and reliable]*". Only few did not recall any messages.

Recall rate of Dhaal brand of condom is increasing over the time. This was followed by Panther brand. Very few did not recall any brand.

In recent past, the places to get condoms cited by most respondents was health post, followed by pharmacy. Other popular sources (not in rank order) cited were, FCHV, government hospital/clinic, private hospital/clinic and sub-health post. Almost none did not know the source of condoms.

The advantage of using condoms cited by the most was '*it prevents STIs/HIV infection*'. Other advantages cited (not in rank orders) were '*can be discontinued if desired to have another child*', '*condoms are easy to use*', and "*less side-effects*". Condom users not knowing the benefits of using condoms has declined in recent past.

The disadvantage cited by most were '*the fear of condom bursting or tearing*' and "It has many side effects". Other disadvantages cited (not in rank order) were '*not effective/becoming pregnant even when used*', and '*difficult to use*'.

Great majority of the current condom users were very satisfied with the method. The major reasons cited were "*lack of side effects*", "*effectiveness*" and "*easy to use*".

In case of condoms, there was a low overall level of disagreement with statements, "*Only bad women buy condoms*" and "*Condoms are used for sex with someone other than your spouse*". This indicates that condoms were not seen as only for use outside of marriage.

Very few condom users intended to use condoms in future. Among users who paid for condoms the last time, were willing NRs 25 for regular and NRs 50 premium condoms.

### **6.13 EMERGENCY CONTRACEPTION**

Few of the respondents had ever heard about emergency contraception.

Among those who heard majority described ECP as '*an emergency measure after unprotected sexual intercourse*', and '*pills that you take after you have sex*'. Others described ECP as '*an abortion pill, ending pregnancy*', and as '*a pill taken by women up to 120 hours (5 days) after unprotected sex to prevent pregnancy*'.

Among those who have heard of ECP, very few received message or information about ECP in the past six months, with radio and TV the most cited sources for information. The next two highest cited sources of information were health workers/health facility and friends or relatives.

Most mentioned source of supply of ECP was pharmacy. Other sources of supplies (not in rank order) were: private hospital/clinic, government hospital/clinic and health post, Marie Stopes, FCHVs, and sub health posts.

The advantage of using ECP cited most was '*it can be used after sex to prevent pregnancy as a result of undesired sex*'. The disadvantages of using ECP cited were (not in rank orders): '*it has many side effects*', '*causes infertility*' and '*ECP is difficult to get*'.

The use of ECP in among currently married women is very low but increasing in recent years (0.6% to 1%).

There was strong agreement with the statement "*Emergency contraception is a good way to prevent pregnancy – you can just take one whenever you're afraid you might be pregnant*", moderate disagreement with the statement "*It is OK to take emergency contraceptive pills continuously instead of another family planning method*" and low agreement with "*Most people think that using ECP is bad*".

Majority of women would buy ECP if they felt that they were at a risk of being pregnant and did not want another child at that time. The median maximum price they were willing to pay for ECP was NRs 135.

### **6.14 CHILD HEALTH AND ORS AND ZINC**

The incidence of diarrhea in last two week among children under-5 years of age is declining in recent past. The diarrheal incidence was higher in the mountains than in the hills.

Almost all respondents were aware of ORS. Exposure to media message on the promotion of use of ORS over the years is increasing. Radio was the most often cited source of ORS promotion messages. This was followed by FCHVs, health facility and/or health worker, television and neighbors.

The three main messages cited as having been seen/heard in the last six months were “*use ORS for the treatment of diarrhea*”, “*Mix a packet of ORS with 1 liter of clean water*” and “*Give ORS frequently*”.

Great majority spontaneously recalled *Jeevan Jal* brand of ORS followed by *Nava Jeevan*.

The major sources of supply of ORS cited by were health post, pharmacy, and FCHVs, government hospital/clinic.

About half of the respondents gave ORS to their child the last time s/he had diarrhea. The most frequent place where the last ORS was obtained was health post/sub-health post followed by (not in rank) FCHVs, and private pharmacy. *Jeevan Jal* was the brand used last time by most respondents followed by *Nava Jeevan*.

Good majority obtained ORS they used last free of cost. The high percentage of respondents receiving ORS for free indicates that it could be difficult to motivate many people to pay for ORS.

The most cited reason for not giving ORS was that the child “*did not have diarrhea*”. Other reasons cited were they *used traditional method*, *gave other medicines*, *ORS not being available nearby*, and *the baby was too young*.

Almost all respondents with children under five said they intended to use ORS if the child has diarrhea in the future.

## **6.15 ZINC**

Awareness to zinc among mothers of children under five years of age who have one child has increased over time. Mothers in hills than mountains were more likely to know about zinc. Similarly knowledge on zinc increased with the level of education and number of media exposure.

Hearing or seeing to any messages or information from any source on zinc in last six months, has increased over the years. The sources of information cited by most were (not on rank order): radio Television, FCHV, health facility or health worker (Sub-health post; hospital, and Friends/relatives.

Two main messages cited as having been seen/heard in the last six months were “*Zinc Zhada Pakhala Bagcha tadha (zinc keeps the diarrhea away)*” and “*Zinc tablets should be given for 10 days/ complete dose should be administered*”. Other frequently cited messages heard by the respondents in last 6 months were: “*Zinc is the right rehydration treatment of diarrhea*”, “*Zinc helps in building immunity/ the risk of new episode in the future reduces*”, and *Zinc reduces the duration of the diarrheal episode*”.

Brand awareness was found to be very low.

Major source of information on zinc cited by most was pharmacy health posts. Other sources were FCHVs, followed by Government hospital/clinic, and hub-health posts.

Use of zinc has declined in recent past. Majority of the women who gave zinc for the last time was less than 6 months. Zinc given last time was obtained from health Post/ sub-health post/PHC followed by FCHVs, private pharmacy, hospital and private clinic/ nursing home. Majority of the respondents got zinc free of cost.

The reason for not giving zinc cited by most was “*no diarrhea*”. Other reasons (not in rank order) were “*No need*”, followed by “*Other medicine was given*”, “*Giving ORS is enough*” and “*Did not have Zinc*”.

Almost all intended to use Zinc in future if their child gets diarrhea. The median price women were ready to pay for 10 tablet zinc was NRs 22.

Women had very strong beliefs related to four of the six statements regarding diarrhea, most agreeing with three - *diarrhea can be caused by drinking unsafe water, children can die from diarrhea, and hand washing with soap can reduce chances of diarrhea*) - and disagreeing with *if my child gets diarrhea it is best just to do nothing and it will be cured as time passes*. These responses demonstrate positive attitudes related to cause of and ways to prevent diarrhea, as well as its seriousness and need for treatment.

On average, beliefs were much weaker for two statements; with more agreeing that *I rely on my health provider/pharmacist to give the correct treatment for my child's diarrhea* and more disagreeing that *most diarrheas can be managed at home without any drugs*. The results of these two seem contradictory.

There were four different types of BCC intervention was launched by GGMS in the program area. Various media and materials such as: *key chain, posters, radio Jingle and TVC* to promote use and compliance of zinc and its health benefit to children in saving from repetitive diarrheal episodes.

Majority of the respondents were exposed to posters followed by radio jingle, TVC and key chain. Majority were exposed to at least one type of media, followed by two at least two, three, and few with all four types.

More than half of the zinc users complied with the recommended dose and duration. The compliance was lower in mountains than in hills.

Major reasons for non-compliance were, *child was cured* followed by *child would not take zinc treatment, child vomited* and *no one told me about compliance*.

## CHAPTER 7: CONCLUSIONS

### 7.1 SOCIO-ECONOMICS AND MEDIA EXPOSURE

There was a wide range of ages and ethnicities among respondents. Most were either housewives or farmers. Overall there was a high level of illiteracy but low education. Many husbands were away from home for more than half of the previous year. Overall, there was rudimentary housing, cooking practices and sources of drinking water as well as sanitation. However, there was extremely high possession of mobile phones.

Radio had higher overall and higher weekly exposure than TV. Both media were less used in the mountains than in the hills.

Given the low exposure to television in mountains, television advertising will not likely be cost-effective.

Based on the demographics and the media exposure and preferences, there were clear differences by region. (See table below).

- Overall, respondents in the mountains were more likely to be younger, more Newari and Buddhist, have less education, more likely to be a farmer, less likely to have absentee husbands, have lower economic status, less likely to own a mobile phone, radio, or TV, and have lower exposure to radio and/or TV than those in the hills.

**Table 7.1 Differentials in the selected characteristics by geographic area**

Characteristics	How Mountain women differ from Hill women
Age	Younger
Ethnicity	Less Brahmin/Chhetri; more Newari
Religion	More Buddhist; less Hindu
Literacy status	Lower
Education Level	Lower
Occupation	More farmer/herder; less self-employed
Husband presence	Lower absentee husbands
SES Quintile	Lower
Mobile Telephone ownership	Lower
Radio and TV ownership	Lower
Radio listening	Lower overall and everyday exposure
Key hours listened to radio (in descending order)	Mountain: 7-8pm, 8-9pm, 3-4pm, 6-7am, 6-7pm Hill: 7-8pm, 6-7am, 8-9pm; 6-7pm
Radio programs listen to at least weekly (among those exposed)	Less likely to listen to all programs except for folk songs
TV listening	Lower overall and everyday exposure
Exposure to radio and/or TV	Lower exposure to either or both

## 7.2 CONTRACEPTION

There is a major opportunity to increase usage of modern methods as the unmet need stands at about 46%.

Awareness of a number of contraceptive methods was very high. Two children is considered to be the ideal number with desired birth spacing of four years.

Husbands are major influencers on current method women were using. Family members talked about and have had an influence on women's contraception use.

Husband's absence was the major reason for not using modern contraceptive followed by desire to have more children.

*Effectiveness and lack of side effects* were the key benefits of contraception.

Provider's explanation about possible side effects and what to do about them were inadequate, which may lead to discontinuation of current method and contraception in general, when women experience problems.

Brand awareness was low for Sangini brand of injectable and condoms.

Radio was the most mentioned source for information in the last six months for both injectables and condoms. Radio was also the most mentioned source for EC.

Key perceived benefits by total respondents vary by product, which provides CRS with an opportunity to position its multiple products to meet a variety of needs for different women at different points in their reproductive cycle (see table below).

- Injectables – can be discontinued, easy to use, long-lasting and effective.
- Condoms - prevent STI/HIV
- Emergency contraception is for unplanned situations; many aware of ECP know the Sangini slogan.

**Table 7.2 Percentage distributions of currently married women aged 15-49 years by their perceived benefit of contraceptives**

Benefits among total respondents (n=1620)	Injectables	Condoms	Emergency Contraception
NONE/DK	19	37	90
Can be discontinued	38	11	-
Easy to Use	27	11	1
Effective	14	3	1
Prevent STI/HIV	-	38	-
Long lasting	17	1	-
Can be used after having sex	-	-	8

Persistent negative perceptions remain for specific methods, including:

- Injectables: side effects (general), excessive bleeding, causes infertility
- Condoms: fear of bursting or tearing
- Emergency contraception: low awareness of product category

**Table 7.3 Percentage distributions of currently married women aged 15-49 years by their perceived disadvantages of contraceptives**

Disadvantages among total respondents (n=1620)	Injectables	Condoms	Emergency Contraception
NONE/DK	30	56	93
Side effects	44	2	3
Excessive bleeding	12	-	-
Fear of bursting or tearing	-	34	-
Causes infertility	9	1	2

There is a potentially large opportunity to grow the volume of emergency contraception. The main barrier is that awareness and ever use of the product are both VERY low. The challenge is how to increase awareness and positive attitudes.

### 7.3 DIARRHEA AND ORS

ORS awareness was quite high but the level of use was relatively low. The foremost reason for non-use was *child didn't have diarrhea*. Other reasons were *it was considered not necessary*, and *baby was too young*.

## CHAPTER 8: RECOMMENDATIONS

It is important to design and use appropriate content and communication methods which are suited to specific audience segments.

### 8.1 GENERAL RECOMMENDATIONS

#### 8.1.1 HOW TO REACH AUDIENCES/CHANNELS

Given the relatively low usage of broadcast media by women, marketing strategy should also focus on non-media channels for key communication, especially in the mountain areas.

- Non media approaches to consider include:
  - Manning stalls in fairs and *haat* bazaars and working with beauty/hair salons for one-on-one interaction, product demonstrations or handouts.
  - Performing street dramas at key *chowks* or junctions to communicate messages.
  - Collaborating with women's groups to interact, share success stories and motivate and encourage their members.
- These approaches can be reinforced through overarching radio programming and mobile phone usage, especially for hill residents, more of whom have mobiles and listen to the radio.
  - For mobile phones:
    - Develop direct dial and simple text messages for relevant products at relevant times. For example, to maximize effectiveness, ORS messages could be used to create awareness during the diarrhea season. Text messages in Nepali script will be more effective. While literacy is overall low, text messages can be shown to others who can read them.
    - CRS should consider a hotline strategy for people to get advice related to products; this could be particularly useful for retaining contraceptive users when people are experiencing side effects or when women need Emergency Contraception
  - For radio:
    - Consider using mini-dramas (like the programs that were most watched/listened to) and/or songs to attract attention. These mini-dramas can also be used during group meetings.
    - Likewise, the most popular times, channels should be used.
- If television is to be considered as part of the mix, in order to reach the maximum audience, it would be best to air TV materials thorough popular channels and in/around most watched programs.

## **8.1.2 POSITIONING/PROMOTION**

- Given the high level of illiteracy, especially among women in the mountains, ensure that brand names and vocabulary and language used in marketing and counseling materials are easy to understand and that images and concepts are clear and concrete.
- Marketing and communication strategy for all products should address the high degree of religious and ethnic diversity in these regions. This is important for both interpersonal and mass communications; people often respond more positively if they feel that images and activities relate more directly to them and their beliefs and background.
- As more women have husbands that live away most of the (or all) year, marketing and communication strategy for all contraceptive and child health products should address this situation.

## **8.2 RECOMMENDATIONS CONCERNING CONTRACEPTION**

### **8.2.1 OBJECTIVES**

1. Increase percentage of women who are using an effective, modern method
2. Increase percentage of women who acquire their method by buying from CRS-supported outlets or those selling CRS products
3. Develop range of interpersonal sources of information, supported by radio and cell-phone reminders

### **8.2.2 PRICING**

- It appears that the prices proposed by interviewers for each product (NRs 45 for injectable, 25 for regular and 50 for premium condoms and 135 for EC) were acceptable to those saying they intend to use that contraceptive in the future and that most were willing to pay.
  - However, CRS should be careful to ensure that their current brand users will continue to purchase that product if prices are increased. Since most current users do not currently pay anything for their contraceptive, it's hard to know how many of them would really pay the current product price.
    - Prices on CRS's two leading condom brands should not be increased based only on the result from this study because only a small number potential condom-using female respondents seemed to indicate that they would pay the stated price. As the key target group is men, it's important to understand the intentions of current brand users, feedback from current male users about prices for each particular brand would be more relevant to any decision about changing prices.

### **8.2.3 HOW TO PROMOTE/INCREASE SALES**

- Conduct branded and/or generic multi-channel campaigns focusing on the key benefits and addressing key barriers for different methods. This is especially important for ECP, given the low level of awareness in mountains and hills.
- Work with local women's groups and/or hairdressers who can pass on information and invitation cards for counseling at Sangini pharmacies.
- Create songs and slogans for different methods/brands that could be played independently of ads.

- Develop a telephone hotline for information and counseling – especially useful for side-effects and emergency contraception.
- Develop call-in quizzes or contests to raise awareness and increase participation about different products in exchange for winning something small or getting name mentioned on-air.
- For EC, in addition to increased mass media to expand knowledge of the product and how it works, narrow-target for emergency contraception.

#### 8.2.4 WHAT TO PROMOTE/POSITIONING

- Increase perceptions that purchased brands and providers are a better value than free ones, perhaps because of the better service provided: *“Sangini providers not only know about all the methods, but they care for you!”*
- Improve Sangini provider quality and attitude to support perceptions of better service. Specifically train providers to actively discuss possible side effects of chosen method and what to do about them, especially with new clients. *“Some side effects are normal, but they usually go away in a few days. If they don’t, come back and see me.”*
- Contraceptives as a category should be promoted as effective and safe.
- Each method should also be promoted with different end benefits to differentiate them. Content should differ for different products.
- Promote injectables (as well as pills) for those having regular sex who want to wait 1-2 years
  - Want to have (more children)? - promote: temporary, safe, reversible methods, focus on spacing/WAITING until ready again
  - Injectables were the most desirable method among these respondents (easy to use as well as best known/most used/best regarded/most likely to use in future).
  - Promote the main benefit of injectables ...that they are longer-lasting only need to do once every three months.
  - Counter the fears and build efficacy about side-effects (specifically bleeding) and that they cause infertility, by increasing level of explanation by service providers, supported by media/print materials and recommending asking if/when have any questions about method.
- Temporary methods are completely reversible – show results/testimonials, focused on young women with one child under a year.
- For those worried about health concerns who don’t want a method that interferes with their body - safe ways to avoid/delay pregnancy; if they’re worried about hormones/effects on body, promote condoms which are not hormonal.
- Promote the main benefit of condoms: prevents STI/HIV/AIDS
- For those having infrequent sex and/or the husband lives away - promote: “once is enough.....to get pregnant” and methods to be used only when having

sex (especially condoms.) “You only need to use one whenever you have sex.”

- For those looking to wait longer than 2 years - effectiveness, well-being and aspirations for children of longer-term methods (IUDs/Implants): “We want to be able to provide our current children all the opportunity we can. We are thinking long-term.”
- Those who have had unprotected sex and are worried about getting pregnant - emergency contraception. Maintain the eCON slogan; it has good recall among those aware of the product.
- Introduce a campaign to increase the level of discussion about family planning between spouses and families overall. Make supporting spacing children an accepted norm. Show mothers-in-law as the change agent - being the ones to suggest family planning to their sons and/or daughters-in-law. Make sure to include husbands in materials/media.
- For those who are opposed to FP or have spouses who are opposed, promote condoms as safe and effective.

### **8.2.5 ADDITIONAL INFORMATION NEEDED**

- In future research, determine what current non-users whose husbands are away part of the year use, if any, when their husbands are home.
- Pricing studies on condoms should be conducted with current brand users of CRS condoms.

## **8.3 DIARRHEA AND ORS**

### **8.3.1 HOW TO PROMOTE/INCREASE SALES**

- Provide training and motivation for private sector health personnel and facilities to promote these products.
- Develop interesting and motivating Point of Purchase materials for pharmacies and shops and job aids for staff there as well as at health facilities and at the community level.
- Use radio to support the public activities, and radio, cell phones and hoarding boards to promote brand names, key benefit/advantages, and remind people where they can buy the ORS.

### **8.3.2 WHAT TO PROMOTE/POSITIONING**

- Recommended message/promotion strategies to increase ORS sales:
  - Target young mothers (15-19 years of age), few of whom have used ORS in the past) to get them to try the product now and then hopefully continue.
  - Promote Nava Jeevan’s product differences/advantages of good taste/kids like.
  - For Nava Jeevan and ORS in general, to counter the belief that young children cannot take it, promote the fact ORS was specially designed for young children.
  - Emphasize that ORS, especially taken together with zinc, is the most effective treatment for diarrhea – much better than any other medicine or traditional remedies.

# ANNEX I – INSTRUMENT AND SCREENERS

## INDIVIDUAL INTERVIEW QUESTIONNAIRE, CURRENTLY MARRIED WOMEN AGED 15-49 YEARS

*DATA COLLECTOR: Administer informed consent (and assent if participant under 18) before starting interview*

IDENTIFICATION				
Questions and filters	Codes/response			
1 NAME OF DISTRICT	_____			
2 NAME OF VILLAGE (VDC) /MUNICIPALITY	_____			
3 WARD NUMBER	[ ] [ ]			
4 TYPE OF PLACE ▪ URBAN.....1 ▪ RURAL.....2	[ ]			
5 CLUSTER NUMBER	[ ] [ ] [ ]			
6 HOUSEHOLD NUMBER	[ ] [ ] [ ]			
7 WOMEN'S IDENTIFICATION NUMBER	[ ] [ ] [ ]			
INTERVIEWER'S VISITS				
	Visit 1	Visit 2	Visit 3	FINAL Visit
Date	[ ] [ ] [ ] [ ] [ ] [ ]	[ ] [ ] [ ] [ ] [ ] [ ]	[ ] [ ] [ ] [ ] [ ] [ ]	[ ] [ ] [ ] [ ] [ ] [ ]
Interviewer's Name	_____	_____	_____	_____
Result*	[ ]	[ ]	[ ]	[ ]
Date next visit	[ ] [ ] [ ] [ ] [ ] [ ]	[ ] [ ] [ ] [ ] [ ] [ ]	[ ] [ ] [ ] [ ] [ ] [ ]	
* Codes Result				
▪ Questionnaire completed	1	▪ House not occupied	5	
▪ Refusal	2	▪ House not seen/not exist	6	
▪ Deferred	3	▪ Other (specify) _____	7	
▪ Interviewee/household not present	4			
Record time interview started	Hour .....: [ ] [ ]			
	Minute .....: [ ] [ ]			

Supervisor Name: \_\_\_\_\_ Date : \_\_\_\_\_ Signature \_\_\_\_\_

Office editor Name: \_\_\_\_\_ Date : \_\_\_\_\_ Signature \_\_\_\_\_

**SECTION 1: RESPONDENT'S BACKGROUND**

<i>N</i> <sup>o</sup>	Questions and filters	Responses/ ..... Codes	Skip
101	How old were you at your last birthday? <i>If under 15 years or over 49years, END</i>	Record age in completed years ..... /_/_/ DK..... 98	
102	Does your husband live here all year?	Yes ..... 1 No..... 2 No response ..... 7	→104
103	About how many months of the last year did he live here?	None ..... 0 Number of Months ..... /_/_/ DK..... 98	
104	Could you please read this sentence to me: <i>Show card to Respondent.</i> <i>“Churot khanu ramro bani hoina”</i> <i>If respondent cannot read whole sentence, probe:</i> <i>Which words can you read to me?</i>	Cannot read anything..... 1 Able to read only part of sentence ..... 2 Able to read whole ..... 3 Other (specify) ..... 4	
105	What is the highest grade of school you completed? <b>(if completed less than one year, record “00”)</b>	Grade (Write completed grade) ..... /_/_/ DK ..... 98	
106	What is the highest grade of school your husband completed? <b>(if completed less than one year, record “00”)</b>	Grade (Write completed grade) ..... /_/_/ DK ..... 98	
107	What religion do you observe?	Hindu ..... 1 Buddhist ..... 2 Islam ..... 3 Kirat ..... 4 Christian ..... 5 Others Specify ..... 6 No response ..... 97	
108	What is your caste/ethnicity?	Specify _____ DK..... 98	
109	What do you currently do for employment?	Unemployed /Looking for work ..... 1 Housewife/Home Worker..... 2 Student ..... 3 Retail sales ..... 4 Self-employed / Small Business Owner ..... 5 Farmer/ Herder ..... 6 Skilled/ Technical Worker..... 7 Maid ..... 8 Government Employee..... 9 Executive/ Managerial/ Professional ..... 10 Migrant Worker..... 11 Others (specify)..... 12 Don't Know ..... 98 No response..... 97	
110	How long have you been living in this district?	All my life ..... 97 Since (write Months) ..... /_/_/ Since (write Years)..... /_/_/ DK..... 98	

**SECTION 2: RESPONDENT'S MEDIA HABITS**

<i>N</i> <sup>o</sup>	Questions and filters	Responses/..... Codes	Skip
201	How often do you listen to a radio?  <b>READ ANSWERS. CHECK ONE ONLY</b>	Not at all..... 1 Less than once in 2 weeks ..... 2 About once every 2 weeks..... 3 About once a week ..... 4 2-3 times a week ..... 5 4-5 times a week ..... 6 Everyday ..... 7 DK ..... 8	→205
202	Which <b>ONE</b> radio <b>station</b> do you listen to most?	Radio Nepal ..... 1 Kantipur FM..... 2 Ujalo FM..... 3 Image FM..... 4 Sagarmatha FM ..... 5 Shri Nagar FM ..... 6 Radio Bheri FM ..... 7 Other regional FM (Specify)----- 8 Others (specify)_____ 9 DK ..... 98	
203	What <b>ONE</b> radio <b>program</b> do you listen to most?	Suva din ..... 1 Love Showcase ..... 2 Radio filmy ..... 3 Guest appearance ..... 4 Filmy gauf..... 5 LokLahari..... 6 Swastha nai dharma ho..... 7 Sathi sanga man ka kura..... 8 Sangini Dial a Doctor..... 9 News ..... 10 Lok Bhaka/Lok Geet/Lok Mala..... 11 Music ..... 12 Other (specify)_____ 13 DK ..... 98	
204	Where do you listen to the Radio? <i>Multiple answers possible</i>	At home..... 1 While at work..... 2 At friend's/relatives house..... 3 Café/bar..... 4 In the car ..... 5 In listening group ..... 6 Other (specify)_____ 7 DK ..... 98	
205	How often do you watch TV? <b>READ ANSWERS. CHECK ONE ONLY</b>	Not at all..... 1 Less than once in 2 weeks ..... 2 About once every 2 weeks..... 3 About once a week ..... 4 2-3 times a week ..... 5 4-5 times a week ..... 6 Everyday ..... 7 DK ..... 8	→301

N°	Questions and filters	Responses/..... Codes	Skip	
206	Which <b>ONE</b> TV station do you watch most?	Nepal TV..... 1 Nepal TV 2..... 2 Kantipur TV ..... 3 Sagarmatha TV ..... 4 Image channel ..... 5 ABC TV ..... 6 AV News TV ..... 7 Mountain TV..... 8 News 24 ..... 9 Nepal 1 ..... 10 Terai TV..... 11 BYAS Channel..... 12 Other (specify) ..... 13 DK ..... 98 Not stated ..... 97		
207	Which <b>ONE</b> TV program do you watch most?	News ..... 1 Tito Satya ..... 2 Jire Khursani ..... 3 Meri bassai ..... 4 Karuna ..... 5 Khota Baji ..... 6 Khichadi ..... 7 Lagan Jurla jasto chha ..... 8 Khabar bhitra ko khabar ..... 9 Kantipur Aaja ..... 10 Pilley in on ..... 11 Woodkandu ..... 12 Clapboards ..... 13	Chalachitra ..... 14 Rat pare paachi ..... 15 Swastarasawal ..... 16 Hello doctor..... 17 Harke Hawaldar..... 18 Chamchami ..... 19 Bhadragoal ..... 20 Hamro Kathmandu ..... 21 Nameste kalliwood ..... 22 Rajatpat ..... 23 Other (specify)____ ..... 24 Not stated ..... 97 Do not know ..... 98	
208	Where do you watch TV? <i>Multiple answers possible</i>	At home..... 1 Neighbor/relative/friend/parents..... 2 Café/bar..... 3 Other (specify)----- 4 DK/NR ..... 8		

**SECTION 3: BIRTH HISTORY, ORS and Zinc**

N°	Questions and filters	Responses/ ..... Codes	Skip
301	How old were you when you (first) got married/Started living with your spouse?	Age ..... [__]	
302	Have you ever been pregnant?	Yes..... 1 No..... 2	→309
303	How many sons have you given birth to that are still alive?	Son (s) (alive) ..... [__]	
304	How many daughters have you given birth to that are still alive?	Daughter(s) (Alive)..... [__]	
305	How many sons have you given birth to that are <b>NOT</b> alive now?	Son(s) (Died) ..... [__]	
306	How many daughters have you given birth to that are <b>NOT</b> alive now?	Daughter(s) (Died)..... [__]	
307	About how long ago was the last time you were pregnant?	Months..... [__] Years..... [__] Currently pregnant ..... 95 Unsure ..... 96 DK/NR ..... 98	→ 309 →309
308	The last time you got pregnant (for this current pregnancy) did you want to get pregnant then, later or not at all?	Did not want ..... 1 Wanted later..... 2 Wanted then..... 3 Other (specify)..... 4 DK..... 8	
309	How many of your children or children you take care of under five years of age live with you in this household?	Number of children under 5 years..... [__] None ..... 97	→ 401

**Section 3.1 Diarrhea, ORS and Zinc**

	<i>Interviewer: At q. 309, if response was "1" just ask about the last birth and fill in column A; if person said 2 or more, fill in both columns A and B.</i>	Response	A. Last birth (youngest)	B. Next-to-last birth (next youngest)
310	A. What is the name of the youngest child (you care for)? <i>If "2" or more at q. 309, , ask:</i> B. What is the name of the next youngest?	Name:	_____	_____
311	A. Is _____ (Name of youngest) a boy or a girl? B. What about _____ (next youngest under 5)?  <i>Please list the <u>sex</u> of the two youngest children born to her or she cares for who are younger than 5 years of age.</i>  <i>If there is only one child aged less than 5 years, list only that child.</i>	Male .....  Female .....	1  2	1  2
312	A. How old is _____ DATE OF BIRTH (Name of youngest)? B. How old is _____ (Name of next youngest)? <b>Please list the <u>age</u> (years &amp; months) of the two youngest children</b>	Age: __yrs  Age __months	[__]  [__]	[__]  [__]
313	A. Has (NAME OF YOUNGEST) had diarrhea in the last 2 weeks? B. Has (NAME OF NEXT YOUNGEST) had diarrhea in the last 2 weeks? <i>Diarrhea is defined as 3 or more loose or watery stools in one day.</i> <i>Skip next question for either/both child, if answer here is 1, Yes.</i>	Yes ..... No ..... Don't remember	1→ 316 2 8	1→ 316 2 8

	<i>Interviewer: At q. 309, if response was "1" just ask about the last birth and fill in column A; if person said 2 or more, fill in both columns A and B.</i>	Response	A. Last birth (youngest)	B. Next-to-last birth (next youngest)
314	<p>A. Has (NAME OF YOUNGEST) had diarrhea in the last 1 month?</p> <p>B. Has (NAME OF NEXT YOUNGEST) had diarrhea in the last 1 month?</p> <p><i>Diarrhea is defined as 3 or more loose or watery stools in one day.</i></p> <p><i>Skip next question for either/both child, if answer here is 1, Yes.</i></p>	<p>Yes .....</p> <p>No .....</p> <p>Don't remember</p>	<p>1→316</p> <p>2</p> <p>8</p>	<p>1→316</p> <p>2</p> <p>8</p>
315	<p>A. Has (NAME OF YOUNGEST) had diarrhea in the last 3 months?</p> <p>B. Has (NAME OF NEXT YOUNGEST) had diarrhea in the last 3 months?</p> <p>C. <i>Diarrhea is defined as 3 or more loose or watery stools in one day.</i></p>	<p>Yes ..... 1</p> <p>No ..... 2</p> <p>Don't remember 8</p>		

316	<p>Have you heard of Oral Rehydration salts (ORS)? <b>(It's a pre-packed preparation given mixing with water during diarrhea)</b></p>	<p>Yes ..... 1</p> <p>No..... 2</p> <p>DK..... 8</p>		<p>2→334</p> <p>8→334</p>
317	<p>Thinking back over the last <b>6 months</b>, have you heard or seen ANY messages/information from any source about ORS</p> <p><i>If 2 or 8, Skip to 320.</i></p>	<p>Yes ..... 1</p> <p>No ..... 2</p> <p>Don't now/remember ..... 8</p>		<p>2→320</p> <p>2→320</p>
318	<p>From what sources did you hear about ORS in the last 6 months?</p> <p><i>(Multiple answers possible)</i></p>	<p>Radio..... 1</p> <p>Television..... 2</p> <p>Newspaper/magazine..... 3</p> <p>Cinema hall/Theater ..... 4</p> <p>FCHV ..... 5</p> <p>Health worker/health facility ..... 6</p> <p>NGO..... 7</p> <p>Pharmacy..... 8</p> <p>In a shop..... 9</p> <p>Community sales agent ..... 10</p> <p>Poster/Hoarding board..... 11</p> <p>Banner..... 12</p> <p>Dangler..... 13</p> <p>Wall painting..... 14</p> <p>Shipper ..... 15</p> <p>Dispenser..... 16</p> <p>Street dramas..... 17</p> <p>Education session..... 18</p> <p>Village health talk ..... 19</p> <p>Friends/relatives ..... 20</p> <p>Neighbor ..... 21</p> <p>Other (specify)----- 22</p> <p>DK/NR ..... 98</p>		

319	<p>What information have you seen/heard about ORS in the last 6 months?</p> <p><i>(multiple answers possible)</i></p>	<p>Use ORS for the treatment of diarrhea..... 1</p> <p>Mix a packet of ORS with 1 liter of clean water ..... 2</p> <p>Give ORS frequently ..... 3</p> <p>It is available in nearby medical and other shops ..... 4</p> <p>Punarjalia Upachaar Ko Laagi (Nava Jeevan in Radio and print)..... 5</p> <p>Other (specify)..... 6</p> <p>DK/NR..... 8</p>	
320	<p>What brand names can you recall for ORS?</p> <p><i>(Multiple answers possible)</i></p>	<p>Relyte ..... 1</p> <p>Revive..... 2</p> <p>Sakti Jal ..... 3</p> <p>Electrobion ..... 4</p> <p>Jeevan Bal..... 5</p> <p>Nava Jeevan..... 6</p> <p>Nawa Jal ..... 7</p> <p>Jeevan Jal..... 8</p> <p>Others specify ..... 9</p> <p>DK ..... 98</p>	
321	<p>Which of the following brand names have you heard of for ORS?</p> <p><i>(Multiple answers possible)</i></p> <p>READ EACH ONE</p>	<p>Relyte ..... 1</p> <p>Revive..... 2</p> <p>Sakti Jal ..... 3</p> <p>Electrobion ..... 4</p> <p>Jeevan Bal..... 5</p> <p>Nava Jeevan..... 6</p> <p>Nawa Jal ..... 7</p> <p>Jeevan Jal..... 8</p> <p>Others specify ..... 9</p> <p>DK ..... 98</p>	
322	<p>Please tell me everywhere one can get/buy ORS</p> <p><i>Multiple answers possible.</i></p>	<p><b>PUBLIC SECTOR</b></p> <p>GOVT. HOSPITAL/CLINIC ..... 1</p> <p>PHC CENTER ..... 2</p> <p>HEALTH POST ..... 3</p> <p>SUB-HEALTH POST ..... 4</p> <p>PHC OUTREACH ..... 5</p> <p>MOBILE CLINIC ..... 6</p> <p>FCHV ..... 7</p> <p>OTHER GOVT. .... 8</p> <p><b>NON-GOVT. (NGO) SECTOR</b></p> <p>FPAN ..... 9</p> <p>MARIE STOPES ..... 10</p> <p>ADRA ..... 11</p> <p>NEPAL RED CROSS ..... 12</p> <p>UMN ..... 13</p> <p>OTHER NGO. .... 14</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/CLINIC ..... 15</p> <p>PHARMACY ..... 16</p> <p>SANGINI OUTLET ..... 17</p> <p>OTHER PRIVATE ..... 18</p> <p><b>OTHER SOURCE</b></p> <p>SHOP ..... 19</p> <p>FRIEND/RELATIVE ..... 20</p> <p>Other (specify) ..... 21</p> <p>Don't know/no answer ..... 98</p>	

323	Did you give ORS to _____ (name of youngest child at q. 310A) the last time s/he had diarrhea?	Yes..... 1 No..... 2 Don't remember ..... 8	
324	Did you give ORS to _____ (name of next youngest child at q. 310B) the last time s/he had diarrhea?	Yes..... 1 No..... 2 Don't remember ..... 8	
325	<b>Check Q323 and Q324 and circle below:</b> If yes in Q323 OR Q324 If No in Q323 AND Q324	1 2	→327
326	Have you ever given ORS to a child under 5?	Yes ..... 1 No..... 2 Don't remember ..... 8	→332 →332
327	About how long ago did you last give ORS?	Months ago..... [ ] Year ago ..... [ ] DK..... 98	
328	Where was the ORS you gave last time obtained?	Hospital..... 1 Health Post/ Sub-health post..... 2 Private Clinic/ Nursing Home ..... 3 Private Pharmacy..... 4 FCHV ..... 5 Others (specify)..... 6 Don't know ..... 8	
329	What brand of ORS did you give last time?	Relyte ..... 1 Revive ..... 2 Sakti Jal..... 3 Electrobion ..... 4 Jeevan Bal ..... 5 Nava Jeevan ..... 6 Nawa Jal..... 7 Jeevan Jal ..... 8 Others (specify)..... 9 DK..... 98	
330	How much was paid for one packet of ORS the last time it was obtained?	NRS..... [ ] Free of cost..... 97 DK..... 98	
331	What Brands of ORS have you ever given to a child with diarrhea?  <i>(Multiple responses possible)</i>	Relyte ..... 1 Revive ..... 2 Sakti Jal..... 3 Electrobion ..... 4 Jeevan Bal ..... 5 Nava Jeevan ..... 6 Nawa Jal..... 7 Jeevan Jal ..... 8 Others (specify)..... 9 DK..... 98	} 333
332	For what reasons have you NEVER used ORS?  <i>(Multiple responses possible)</i>	Unaware of ORS treatment ..... 1 Not available nearby..... 2 Given other medicine ..... 3 Adopted traditional remedies ..... 4 Baby is too small..... 5 No diarrhea ..... 6 Other (specify)..... 7 Do not know ..... 98	
333	Do you intend to use ORS if your child has diarrhea in the future?	Yes ..... 1 No..... 2 DK..... 8	

**Section 3.2 Zinc**

N°	Questions and filters	Responses	Skip
334	Have you heard of Zinc for children	Yes ..... 1 No.....2 DK.....8	→356 →356
335	Thinking back over the last <u>6 months</u> , have you heard or seen ANY messages/information from any source about ZINC	Yes ..... 1 No .....2 Don't now/remember ..... 8	→338 →338
336	From what sources did you hear about ZINC in the last 6 months?  <i>(Multiple answers possible)</i>	Radio..... 1 Television.....2 Newspaper/magazine.....3 Cinema hall/Theater .....4  FCHV .....5 Health worker/facility.....6  NGO.....7 Pharmacy.....8 In a shop.....9 Community sales agent .....10  Poster/Hoarding board.....11 Banner .....12 Dangler.....13 Wall painting.....14 Shipper .....15 Dispenser.....16  Street dramas .....17 Education session .....18 Village health talk .....19  Friends/relatives .....20 Neighbor .....21 Other (specify)----- .....22 DK/NR .....98	

N°	Questions and filters	Responses	Skip
337	What information have you seen or heard about zinc in the last 6 months?  <i>(Multiple answers possible)</i>	Zinc Zhada Pakhala Bagcha tada..... 1 Zinc is the right treatment of diarrhea .....2 Zinc tablets should be given for 10 days/ Complete dose should be administered .....3 Zinc helps in building immunity/reduces risk of future episodes....4 Zinc reduces the duration of the diarrheal episode .....5 Wash hands with soap .....6 Should not give stale food .....7 Give boiled water and sugar-salt solution/plenty of liquid to child with diarrhea.....8 Zinc should be used along with ORS/Zinc with ORS cures faster .....9 Jhada Pakhala Ko Upachar Zinc Chakki Ko Prayog.....10 Treating drinking water .....11 Punerjaliya Jhol Banaune Tarika .....12 Punerjaliya Jhol Khuwaune Tarika.....13 Zinc Chakki Ka Faida Haru.....14 Zinc Chakki Khuwaye Das Din Lagatar Pakhala Rokincha, Hudaina Barambar.....15 Pakhala Ko Gharmai Upachar Garne Char Niyam Haru .....16 Others (specify).....17 Don't know .....98	
338	What brand names can you recall for Zinc?  <i>(Multiple answers possible)</i>	Z-DIS 10 ..... 1 Z-DIS 20 ..... 2 Zinc-DT 10..... 3 Zinc-DT 20..... 4 ZINEP DT 10 ..... 5 ZINEP DT 20 ..... 6 ZINCOVA-20 ..... 7 ZN-DT..... 8 ZN-DT 10..... 9 Other specify ..... 10 DK..... 98	
339	Which of the following brand names have you heard of for Zinc?  <i>(Multiple answers possible)</i> READ EACH ONE	Z-DIS 10 ..... 1 Z-DIS 20 ..... 2 Zinc-DT 10..... 3 Zinc-DT 20..... 4 ZINEP DT 10 ..... 5 ZINEP DT 20 ..... 6 ZINCOVA-20 ..... 7 ZN-DT..... 8 ZN-DT 10..... 9 Other specify ..... 10 DK..... 98	

N°	Questions and filters	Responses	Skip
340	Please tell me everywhere one can get/buy ZINC  <i>Multiple answers possible.</i>	PUBLIC SECTOR GOVT. HOSPITAL/CLINIC..... 1 PHC CENTER.....2 HEALTH POST .....3 SUB-HEALTH POST .....4 PHC OUTREACH.....5 MOBILE CLINIC.....6 FCHV .....7 OTHER GOVT.....8 NON-GOVT. (NGO) SECTOR FPAN.....9 MARIE STOPES.....10 ADRA .....11 NEPAL RED CROSS.....12 UMN .....13 OTHER NGO.....14 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC .....15 PHARMACY .....16 SANGINI OUTLET .....17 OTHER PRIVATE.....18 OTHER SOURCE SHOP.....19 FRIEND/RELATIVE .....20 Other (specify) -----21 Don't know/no answer .....98	
341	Did you give Zinc to _____ (name of youngest child at q. 310A) the last time s/he had diarrhea?	Yes ..... 1 No 2 Don't remember.....8	 →345 →345
342	What dose of Zinc per day was given to (NAME)? [SA]	Half tablet.....1 Whole tablet .....2 Others (specify)_____3	
343	For how many days did you give Zinc to (NAME)? Interviewer: Fill in number of days	Days ..... [ ][ ] 10 days.....1 Less than 10 days .....2 More than 10 days.....2 DK .....8	 →345 →345 →345
344	If the number in Q343 was less than 10 days, then ask) Was there a reason (NAME) only took X doses rather than all 10 doses? Multiple Response	Child was cured.....1 Child would not take Zinc treatment .....2 Child vomited treatment .....3 Wanted to save remaining treatment for future illness.....4 Did not purchase full course of Zinc .....5 No one told me to give all the treatment.....6 Thought I needed to give Zinc only along with ORS .....7 Child still taking the treatment .....8 Others (specify)_____9 Don't know .....98	
345	Did you give Zinc to _____ (name of next youngest child at q. 310B) the last time s/he had diarrhea?	Yes ..... 1 No ..... 2 Not applicable (has no 2nd U-5 child).....3 Don't remember .....8	 →349 →349 →349

N°	Questions and filters	Responses	Skip
346	What dose of Zinc per day was given to (NAME)? [SA]	Half tablet..... 1 Whole tablet .....2 Others (specify)_____ .....3	
347	For how many days did you give Zinc to (NAME)? Interviewer: Fill in number of days	Days ..... [ ][ ] 10 days ..... 1 Less than 10 days .....2 More than 10 days.....3 DK .....8	→349 →349 →349
348	If the number in Q347 was less than 10 days, then ask) Was there a reason (NAME) only took X doses rather than all 10 doses? Multiple Response	Child was cured..... 1 Child would not take Zinc treatment .....2 Child vomited treatment .....3 Wanted to save remaining treatment for future illness.....4 Did not purchase full course of Zinc .....5 No one told me to give all the treatment.....6 Thought I needed to give Zinc only along with ORS .....7 Child still taking the treatment .....8 Others (specify)_____ .....9 Don't know .....98	
349	Check Q341 and Q345 and circle below: If yes in Q341 OR Q345 If No in Q341 AND Q345	1 2	→351
350	Have you ever given Zinc to a child under 5?	Yes ..... 1 No.....2 Don't remember .....8	2→354 8→355
351	About how long ago did you last give Zinc?	Months ago..... [ ][ ] Year ago ..... [ ][ ] DK.....98	
352	Where was the Zinc you gave last time obtained?	Hospital ..... 1 Health Post/ Sub-health post.....2 Private Clinic/ Nursing Home .....3 Private Pharmacy.....4 FCHV .....5 Others (specify)_____ .....6 Don't know .....8	
353	How much was paid for one 10-day supply of Zinc the last time it was obtained?	NRS ..... [ ][ ] Free of cost .....97 DK .....98	355
354	For what reasons have you NEVER given zinc to a child when he/she had diarrhoea  (Multiple responses possible)	Unaware of Zinc treatment ..... 1 Not available nearby .....2 Given other medicine .....3 Adopted traditional remedies.....4 Baby is too small .....5 Gave ORS/ ORS is enough.....6 No diarrhea.....7 Did not have zinc when needed .....8 Don't think Zinc is effective .....9 Other (specify)_____ .....10 Do not know .....98	
355	Do you intend to give zinc if your child has diarrhea in the future?	Yes ..... 1 No.....2 DK.....8	

Q356 How many times have you seen each of these in last 6 months? IF NONE, WRITE 00. IF 100 OR MORE , WRITE 97

Number of times



A  
[ ]  
Don't know

B  
[ ]  
Don't know

C  
[ ]  
Don't know

D  
[ ]  
Don't know

Q357 How many times hve you seen this in last 6 months?  
IF NONE, WRITE 00. IF 100 OR MORE , WRITE 97

Number of times

**जिङ्ग चक्की खुवाए १० दिन लगातार,  
पखाला रेकिन्छ, हुँदैन बारम्बार**



**पखालाको घरैमा उपचार गर्ने ८ नियमहरू**

<p>१. प्रसृत मात्रामा मोलकुराहरु खुवाउनुहोस् ।</p>	<p>२. बच्चालाई साविकको खाना पटक पटक खुवाइने रहनुहोस् ।</p>	<p>३. १० दिनसम्म लबिराई जिङ्ग चक्की खुवाउनुहोस् ।</p>	<p>४. अवरुधामा सुपार नआए वा कल बिरानी भए, खान पिउन नसके, उचरी आए, दिशामा रगत देखिइयो बच्चाको तुरन्त स्वास्थ्य संस्थामा लैजाउनुहोस् ।</p>
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**जिङ्ग चक्कीका फाइदाहरू**

- पखाला हुने पटकमा कमी ल्याउँछ, छिटो निको पार्छ ।
- रोगसँग लड्ने शक्तिको विकास गराउँछ ।
- प्रसृत फेरी हुन सक्ने समस्यालाई कम गराउँछ ।
- बच्चा निकरस हुनबाट बचाई मृत्युदरमा कमी ल्याउँछ ।



**जिङ्ग चक्की खुवाउने उमेर र मात्रा**

<p>० महिना देखि ५ महिना सम्मको बच्चाको पखाला लाग्दा पुनर्जलीय मोलको सघना १० मि.ग्रा. को भए पछि चक्की वा २० मि.ग्रा. को भए आधा जिङ्ग चक्की १० दिनसम्म लगातार खुवाउनु पर्छ ।</p>	<p>६ महिना देखि ५ वर्ष सम्मको बच्चाको पखाला लाग्दा पुनर्जलीय मोलको सघना १० मि.ग्रा. को भए दुई चक्की वा २० मि.ग्रा. को भए पछि जिङ्ग चक्की १० दिनसम्म लगातार खुवाउनु पर्छ ।</p>
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**जिङ्ग चक्की खुवाउने तरिका**

<p>बडो बच्चाको अतिरिक्त जसको पानी वा अन्नको टुट दिनुपर्छ ।</p>	<p>त्यसमा उमेर अनुसार जिङ्ग चक्कीको मात्रा राख्नुपर्छ ।</p>	<p>चक्कीलाई राम्रो घोलिन दिनुपर्ने र घोलिइको औषधी बच्चाको खुवाउनुपर्ने ।</p>	<p>जिङ्ग चक्कीको पूर्ण अन्त्यको लागि अठारसाल सेकेभ पनि १० दिनसम्म लगातार खुवाउनु पर्छ ।</p>
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**जिङ्ग चक्की कहाँ पाईन्छ**

जिङ्ग चक्की अग्रिकको स्वास्थ्य संस्था र महिला स्वास्थ्य स्वयं सेविकाहरूबाट वि.मुलक पाइन्छ तथा औषधी पसलहरूमा पनि किउन पाईन्छ ।



[ ]  
Don't know

<p>Q358 How many time have you seen this in last 6 months? IF NONE, WRITE 00. IF 100 OR MORE , WRITE 97</p>	<p>How many times?</p>
	<p>[ ] ] Don't know</p>

N°	Questions and filters	Responses	Skip
359	<p>What jingle/song can you tell me about zinc that you've heard on the radio at any time during the past six months?</p> <p>Zinc Chakki khuwa e 10 din lagatar, pakhalā rokin cha, hu dai na baram bar</p>	<p>Did they get the jingle correct? Yes, completely ..... 1 Somewhat ..... 2 No ..... 3 DK ..... 8</p>	1 → 361
360	<p>Have you heard this song/ad on the radio in the last 6 months??</p> <p><i>Play or interviewer sing Radio spot/song for respondent (Nepali and Tamang)</i></p>	<p>Yes..... 1 No..... 2 DK ..... 8</p>	2 → 362 8 → 362
361	<p>About how many times have you heard this song/ad in last 6 months?</p>	<p>..... [ ] ]</p>	
362	<p>Have you seen any ads on TV about zinc in the last 6 months?</p>	<p>Yes..... 1 No..... 2 DK ..... 8</p>	2 → 364 8 → 364

N°	Questions and filters	Responses	Skip
363	Can you tell me what the ad was about? What you saw or heard? (Multiple answer)	Diarrhea 1 Giving ORS and ZINC together 2 Giving zinc for 10 days 3 Zinc Chakki Khuwae 10 Din Lagatar, Pakhala Rokincha, Hudai Na Barambar 4 Other (specify) 5	
364	Have you seen this ad in the last 6 months <b>Show TVC</b>	Yes..... 1 No..... 2 DK..... 8	→ 366 → 366
365	If yes, about how many times?	..... [ ] Don't know..... 98	

#### Attitudes towards diarrhea, zinc and ORS

366	Statements	Strongly Agree	Neither Agree nor disagree	Strongly Disagree	No response
1	Zinc should be given for 10 consecutive days	3	2	1	8
2	There is a place nearby where I can get Zinc when my child needs it	3	2	1	8
3	Zinc is effective for treatment of diarrhea	3	2	1	8
4	Zinc reduces the duration of a diarrheal episode	3	2	1	8
5	Zinc does not reduce the severity of a diarrheal episode	3	2	1	8
6	Zinc reduces the risk of a new diarrheal episode in the following 2 to 3 months	3	2	1	8
7	Shops nearby here always have ORS	3	2	1	8
8	My child doesn't like ORS	3	2	1	8
9	If you give ORS, you don't need to give Zinc too	3	2	1	8
10	If my child gets diarrhea it is best just to do nothing and it will pass in time.	3	2	1	8
11	It is too difficult to remember to give a child Zinc when the diarrhea has stopped	3	2	1	8
12	Zinc should be given along with ORS/ORT to be most effective.	3	2	1	8
13	I rely on my health provider/pharmacist to give the correct treatment for my child's diarrhea	3	2	1	8
14	I know how to prepare ORS	3	2	1	8
15	Hand washing with soap can reduce chances of diarrhea	3	2	1	8

**SECTION 4: CONTRACEPTION**

N°	Questions and filters	Responses/.....Codes	Skip
Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy			
401	Have you ever heard of <u>ANY</u> ways or methods a person can use to avoid getting pregnant?	Yes..... 1 No..... 2	→ 501
402	Which ways or methods have you heard about? Read (method and descriptions completely) for each method not mentioned spontaneously		403 Have you ever used?(Method)
1	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	Yes..... 1 No..... 2	Yes ..... 1 No..... 2
2	MALE STERILIZATION Men can have an operation to avoid having any more children.	Yes..... 1 No..... 2	Yes ..... 1 No..... 2
3	IUD Women can have a loop or coil placed inside them by a doctor or a nurse.	Yes..... 1 No..... 2	Yes ..... 1 No..... 2
4	INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	Yes..... 1 No..... 2	Yes ..... 1 No..... 2
5	IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse that can prevent pregnancy for one or more years.	Yes..... 1 No..... 2	Yes ..... 1 No..... 2
6	PILL Women can take a pill every day to avoid becoming pregnant.	Yes..... 1 No..... 2	Yes ..... 1 No..... 2
7	CONDOM Men can put a rubber sheath on their penis before sexual intercourse.	Yes..... 1 No..... 2	Yes ..... 1 No..... 2
8	FEMALE CONDOM: Women can place a sheath in their vagina before sexual intercourse.	Yes..... 1 No..... 2	Yes ..... 1 No..... 2
9	RHYTHM METHOD Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	Yes..... 1 No..... 2	Yes ..... 1 No..... 2
10	WITHDRAWAL Men can be careful and pull out before climax.	Yes..... 1 No..... 2	Yes ..... 1 No..... 2
11	Have you heard of any other ways or methods that women or men can Use to avoid pregnancy?	Specify ----- No..... 2	Specify ----- No..... 2
<b>404</b>	<b>Check Q402 &amp; 403; and Circle below</b>		
	Never used any method (Q403 1 to 11=2).....	1	1→423
	Ever used male sterilization or female sterilization (Q4031=1 or Q4032=1).....	2	2→407
	Ever used any method other than sterilization .....	3	
	Not used any method(Q4021 to Q40211= 2).....	4	4→424
405	Are you currently using any method to avoid getting pregnant?	Yes ..... 1 No ..... 2 Not stated ..... 8	1→407 2 8→407

N°	Questions and filters	Responses/.....Codes	Skip
406	For what reasons are you NOT currently using any modern method of contraception?  <i>(Multiple responses possible)</i>	Pregnant ..... 1 Infrequent sex ..... 2 Menopausal, hysterectomy ..... 3 Sub-fecund, in-fecund ..... 4 Wants more children ..... 5 Respondent opposed ..... 6 Husband opposed ..... 7 Others opposed ..... 8 Religious prohibit ..... 9 Fatalistic/up to God ..... 10 Knows no method ..... 11 Knows no source ..... 12 Health concerns/fear side effects ..... 13 Lack of access ..... 14 Inconvenient to use ..... 15 Interfere with body ..... 16 Husband away from home ..... 17 Child too young/ menses not yet restarted ..... 18 Other(specify) ..... 19 DK ..... 98	→419
407	What method of family planning are you currently using to avoid or delay pregnancy?	Female Sterilization ..... 01 Male Sterilization ..... 02 IUD ..... 03 Injectables ..... 04 Implants ..... 05 Pills ..... 06 Male Condoms ..... 07 Female Condoms ..... 08 Rhythm/periodic abstinence ..... 09 Withdrawal ..... 10 Lactational amenorrhea ..... 11 Foams/Jelly ..... 12 Other traditional (SPECIFY) ..... 13	→411 →411
<b>SEE Q No 407, IF CURRENT METHOD IS NOT INJECTABLE skip to: 411</b>			
408	Where was the injectable you got last time obtained?	Hospital ..... 1 Health Post/ ..... 2 Sub-health post ..... 3 Private Clinic/ Nursing Home ..... 4 Private Pharmacy ..... 5 Outreach clinic ..... 6 Mobile camp ..... 7 Others (specify) ..... 8 DK ..... 88	
409	What brand of injectable did you get last time?	Sangini ..... 1 Depo Provera ..... 2 Other (specify) ..... 3 DK ..... 8	
410	How much did the last injectable cost?	NRS ..... [ ] Free of cost ..... 997 DK ..... 998	
411	Overall how satisfied are you with the method you are using now?	Very ..... 1 Somewhat ..... 2 Not ..... 3	

N°	Questions and filters	Responses/.....Codes	Skip
412	For what reasons?  <i>(Multiple responses possible)</i>	Effective ..... 1 No side effects..... 2 Easy to take ..... 3 Inexpensive ..... 4 Ineffective ..... 5 Side effect ..... 6 Difficult to use ..... 7 Expensive ..... 8 Service center too far..... 9 Permanent , long lasting ..... 10 Other (specify)..... 11	
413	For what reasons did you decide to use this method instead of using other methods of contraception?  <i>(Multiple responses possible)</i>	Very effective to prevent pregnancy..... 1 Safe/few side effects..... 2 Easy to use ..... 3 Disliked other methods..... 4 Recommended by service provider ..... 5 Recommended by friends/relatives..... 6 Recommended by husband..... 7 Don't know about other method..... 8 Permanent , long lasting ..... 9 Confirm for 3 months ..... 10 Desire for no more children..... 11 Other (specify)..... 12	
415	Was your husband in favor or opposed to the idea of using the method you are currently using?	In favor..... 1 Opposed ..... 2 Neutral ..... 3 Don't know ..... 8	
416	Where did you first obtain the method you are currently using?	<b>PUBLIC SECTOR</b> GOVT. HOSPITAL/CLINIC ..... 1 PHC CENTER ..... 2 HEALTH POST ..... 3 SUB-HEALTH POST ..... 4 PHC OUTREACH ..... 5 MOBILE CLINIC ..... 6 FCHV ..... 7 OTHER GOVT. .... 8 <b>NON-GOVT. (NGO) SECTOR</b> FPAN ..... 9 MARIE STOPES..... 10 ADRA ..... 11 NEPAL RED CROSS ..... 12 UMN ..... 13 OTHER NGO..... 14 <b>PRIVATE MEDICAL SECTOR</b> PRIVATE HOSPITAL/CLINIC/..... 15 PHARMACY ..... 16 SANGINI OUTLET ..... 17 OTHER PRIVATE..... 18 <b>OTHER SOURCE</b> SHOP ..... 19 FRIEND/RELATIVE..... 20 Other (specify) ..... 21 Don't know/don't remember ..... 98	

N°	Questions and filters	Responses/.....Codes	Skip
417	At that time, were you told about possible side effects or problems you might have with this method?	No ..... 1 Yes ..... 2 DK/NR ..... 8	
418	Were you told what to do if you experienced side effects?	No ..... 1 Yes ..... 2 DK/NR ..... 8	
419	How old were you when you first started using ANY method to delay or space births?	Age in completed years ..... [__] DK ..... 98	
420	What method was the first one you used?	Female Sterilization..... 01 Male Sterilization ..... 02 IUD ..... 03 Injectables ..... 04 Implants..... 05 Pills ..... 06 Male Condoms ..... 07 Female Condoms..... 08 Rhythm/periodic abstinence ..... 09 Withdrawal..... 10 Lactational amenorrhea ..... 11 Foams/Jelly ..... 12 Other traditional (SPECIFY)..... 13	
421	How many living children did you have when you first started using X (first method) to delay or limit births?	Number of children ..... [__] DK ..... 98 None..... 97	→424
422	How old was your youngest child at the time you first started using X (first method)?	Age of youngest child: Month ..... [__] Year..... [__] DK ..... 98	→424 →424 →424
423	For what reasons have you never used any (modern) method to delay or limit births?  <b>Multiple Response</b>	Infrequent sex ..... 1 Menopausal, hysteria..... 2 Sub-fecund, in-fecund ..... 3 Wants more children ..... 4 Respondent opposed..... 5 Husband opposed ..... 6 Others opposed..... 7 Religious prohibit ..... 8 Fatalistic/up to God ..... 9 Knows no method ..... 10 Knows no source..... 11 Health concerns/fear side effects ..... 12 Lack of access ..... 13 Inconvenient to use ..... 14 Interfere with body ..... 15 Husband away ..... 16 Other (specify)..... 17 DK..... 98	



Qno	Question	Response Code	a. Injectable	b. Condom	c. EC
429	From what sources did you hear about _____ in the last 6 months?  <i>(Multiple answers possible)</i>	Radio..... Television ..... Newspaper/magazine/broacher ..... Poster/Hoarding Board..... Street dramas ..... In a shop..... Cinema hall/Theater ..... Husband/Partner ..... Other Relatives ..... Friend..... Neighbor ..... FCHV ..... Health workers/Health facility ..... Other specify)..... DK/DR.....	1 2 3 4 5 6 7 8 9 10 11 12 13 14 98	1 2 3 4 5 6 7 8 9 10 11 12 13 14 98	1 2 3 4 5 6 7 8 9 10 11 12 13 14 98
430	What information have you seen/heard about _____ in the last 6 months?  <i>(Multiple answers possible)</i>	<b><u>Injectable:</u></b> Sangini Tin Mehine Sui (Sangini in radio and print)..... Ek Patak Lagae Pachi tin Mahina Dhukka (Sangini in radio and print)..... Ma HunTapai Ki Sangini (TVC-) Other (specify)..... DK  <b><u>Condom</u></b> When you get close get panther ..... Jaba Samipayata Badcha Taba Panther Chaincha ..... Surchit Ra Bharpardo..... Panther Premium Condom for Pleasure and Protection..... D'zire Dotted Condom- Make Each Moment Memorable (In radio and print) ... Surachit Ra Bhar-Pardo [Safe and reliable] Other (specify)..... DK .....  <b><u>EC</u></b> Simple solution for difficult situation/(Aftariya Parishthiti Ma Sajilo Upaya) ..... Eecon-Aakasmit Garbha Nirodhak Chakki (Econ TVC) ..... Prevents pregnancy ..... Other (specify)..... DK .....	1 2 3 4 98	1 2 3 4 5 6 7 8	1 2 3 4 98

Qno	Question	Response Code	a. Injectable	b. Condom	c. EC
431	What brand names can you recall for _____?  <i>(Multiple answers possible)</i>	<p><b><u>Injectable:</u></b>  Sangini..... 1  Depo Provera ..... 2  Other (specify)____ 3  DK ..... 8</p> <p><b>Condom:</b>  Panther..... 1  Dhaal ..... 2  D'zire..... 3  Jodi ..... 4  Cobra Dotted..... 5  Fire Xtacy ..... 6  Wild Cat Dotted..... 7  Other (specify) ----- 8  DK ..... 98</p> <p><b><u>EC :</u></b> eCon ..... 1  Feminor EC ..... 2  I-Pill..... 3  Unwanted 72..... 4  Others pecify) ..... 5  DK ..... 8</p>			
432	Please tell me everywhere one can get/buy _____?  Multiple responses possible.	<b>PUBLIC SECTOR</b> GOVT. HOSPITAL/CLINIC ..... 1 PHC CENTER ..... 2 HEALTH POST ..... 3 SUB-HEALTH POST ..... 4 PHC OUTREACH ..... 5 MOBILE CLINIC ..... 6 FCHV ..... 7 OTHER GOVT. .... 8 <b>NON-GOVT. (NGO) SECTOR</b> FPAN ..... 9 MARIE STOPES ..... 10 ADRA ..... 11 NEPAL RED CROSS ..... 12 UMN ..... 13 OTHER NGO..... 14 <b>PRIVATE MEDICAL SECTOR</b> PRIVATE HOSPITAL/CLINIC/ ..... 15 PHARMACY ..... 16 SANGINI OUTLET ..... 17 OTHER PRIVATE..... 18 <b>OTHER SOURCE</b> SHOP ..... 19 FRIEND/RELATIVE ..... 20 Other (specify) ----- 21 Don't know don't remember ..... 98			

Qno	Question	Response Code	a. Injectable	b. Condom	c. EC
433	In your opinion, what are the benefits of using _____?  <i>(Multiple answers possible)</i>	Effective method..... Easy to use..... Can be discontinued if desired to have another child..... Less side effects..... Long lasting..... Prevents STIs/HIV infection..... Can be used after sex to prevent pregnancy as a result of undesired sex..... Don't need to take something all the time No one will know about it Other (specify)..... DK.....	1 2 3 4 5 6 7 8 9 10 98	1 2 3 4 5 6 7 8 9 10 98	1 2 3 4 5 6 7 8 9 10 98
434	In your opinion, what are the disadvantages of using _____?  <i>(Multiple answers possible)</i>	Difficult to use..... It has many side effects..... It requires several visits to doctor..... Difficult to get..... Expensive..... It use is prohibited for religious reasons..... It causes infertility..... Not accepted by husband..... Not accepted by other family members..... Fear of bursting or tearing [Condom]..... Not effective (becoming pregnant even used)..... Does not prevent HIV/AIDS/STDs..... Do not know how it works..... Other (specify)----- DK.....	1 2 3 4 5 6 7 8 9 10 11 12 13 14 98	1 2 3 4 5 6 7 8 9 10 11 12 13 14 98	1 2 3 4 5 6 7 8 9 10 11 12 13 14 98



Qno	Question	Response Code	Skip
509	Which modern method(s) are you most likely to (continue to) use? <i>Multiple answers possible</i>	Female Sterilization ..... 01 Male Sterilization ..... 02 IUD..... 03 Injectables..... 04 Implants..... 05 Pills..... 06 Male Condoms ..... 07 Female Condoms ..... 08 Rhythm/periodic abstinence ..... 09 Withdrawal ..... 10 Lactational amenorrhea ..... 11 Foams/Jelly..... 12 Avoid sex..... 13 Emergency contraception ..... 14 Other (specify)_____ 15 DK/NR ..... 98	
510	<b>Check Q509 and Circle below</b> Mentioned Injectable (code 4) ..... 1 Not mentioned Injectable..... 2		→514
511	Would you buy a dose of injectable a price of Rs 80	Yes ..... 1 No ..... 2 DK..... 8	→ 513
512	Would you buy a dose of injectable at a price of RS 50	Yes ..... 1 No ..... 2 DK..... 8	
513	What is the maximum price you would be willing to pay for dose of Injectable?	NRS..... [ ] DK..... 98	
514	<b>Check Q509 and Circle below</b> Mentioned Condom (code 7) ..... 1 Not mentioned Condom..... 2		2→521
515	Would you buy a pack of three <i>premium</i> condoms at a price of RS 50	Yes ..... 1 No ..... 2 DK..... 8	→ 517
516	Would you buy a pack of three <i>premium</i> condoms at a price of RS 35?	Yes ..... 1 No ..... 2 DK..... 8	
517	What is the maximum price you would be willing to pay for a pack of three <i>premium</i> condoms?	NRS..... [ ] DK..... 98	
518	Would you buy a pack of three <i>standard</i> condoms at a price of RS 20?	Yes ..... 1 No ..... 2 DK..... 8	→520
519	Would you buy a pack of three <i>standard</i> condoms at a price of RS 15?	Yes ..... 1 No ..... 2 DK..... 8	
520	What is the maximum price you would be willing to pay for a pack of three <i>standard</i> condoms?	NRS..... [ ] DK..... 98	
521	<b>Check Q424 and Circle below</b> Mentioned Emergency Contraception (yes - code 1) ..... 1 Not mentioned Emergency Contraception ..... 2		→525
522	Would you buy a one-time pack of EC at a price of RS 125 if you felt that you are at risk of being pregnant and didn't want an(other) child at that time?	Yes ..... 1 No ..... 2 DK..... 8	→ 524

Qno	Question	Response Code	Skip
523	Would you consider buying emergency contraception at NRS 100	Yes ..... 1 No ..... 2 DK..... 8	
524	What is the maximum price you would be willing to pay for a pack of emergency contraception	NRS..... [ ] DK..... 998	
525	<b>Check q325, Q326 and Q333 and Circle below</b> If 325, Q326 or Q333=1 ..... 1 If 325, Q326 and Q333<>1 ..... 2		→ 529
526	Would you buy a one-time pack of ORS at a price of RS 25	Yes ..... 1 No ..... 2 DK..... 8	→ 528
527	Would you buy a one-time pack of ORS at a price of RS 10	Yes ..... 1 No ..... 2 DK..... 8	
528	What is the maximum price you would be willing to pay for a one-time pack of ORS?	NRS..... [ ] DK..... 98	
529	<b>Check Q349, Q350 and Q355 and Circle below</b> If Q349, Q350 or Q355=1..... 1 If Q349, Q350 and Q355>1 ..... 2		→ 601
530	Would you buy a one-time pack of Zinc at a price of RS 20?	Yes ..... 1 No ..... 2 DK..... 8	→ 532
531	Would you buy a one-time pack of Zinc at a price of RS 10?	Yes ..... 1 No ..... 2 DK..... 8	
532	What is the maximum price you would be willing to pay for a pack of Zinc?	NRS..... [ ] DK..... 98	

**SECTION 6: ATTITUDES TOWARDS FAMILY PLANNING AND METHODS**

601	<i>I am going to read a list of statements, and I would like you tell me whether you agree or disagree with the statement.</i>				
<b>ATTITUDE QUESTIONS</b>					
	<b>STATEMENTS</b>	<i>Agree</i>	<i>Neither agree nor disagree</i>	<i>Disagree</i>	<i>No answer</i>
01	Shopkeepers make women feel bad when buying contraceptives	3	2	1	8
02	Injectables are easier to use than other contraceptives	3	2	1	8
03	Most people around here don't care who uses or does not use contraception	3	2	1	8
04	Family members have lots of influence on the use of contraception by women in this community	3	2	1	8
05	My family does not talk about contraception	3	2	1	8
06	If you stop using a contraceptive method, you can get pregnant again	3	2	1	8
07	Injectables can make you gain weight	3	2	1	8
08	Condoms are only used for sex with someone other than your spouse.	3	2	1	8
09	I'm afraid to take Injectables in the pharmacy, since others might see me.	3	2	1	8
10	Oral contraceptive pills have more side effects than other contraceptives	3	2	1	8
11	Only bad women buy condoms	3	2	1	8
12	Children born by a woman who used Injectables can have many things wrong with them	3	2	1	8

**SECTION 7: HOUSEHOLD CHARACTERISTICS**

N°	Questions and filters	Responses/ ..... Codes	Skip																																													
701	What is the main source of drinking water for members of your household?	Piped water Piped into house .....1 Piped to yard/plot .....2 Public tap/standpipe .....3 Tube well or borehole .....4 Dug well Protected well .....5 Unprotected well .....6 Water from spring Protected spring .....7 Unprotected spring .....8 Rainwater .....9 Tanker truck .....10 Surface water (river/dam/ Lake/pond/stream/canal/ irrigation canal) .....11 Stone tap/dhara .....12 Bottled water .....13 Other (specify) .....14																																														
702	Where is that water source located?	In own house .....1 In own yard/plot .....2 Elsewhere .....3																																														
703	What kind of toilet facility do members of your household usually use?	Flush or pour flush toilet Flush to piped sewer .....1 Flush to septic tank .....2 Flush to pit latrine .....3 Flush to somewhere else .....4 Flush, don't know where .....5 Pit latrine Ventilated improved pit latrine .....6 Pit latrine with slab .....7 Pit latrine without slab/ .....8 Composting toilet .....9 Bucket toilet .....10 No facility/bush/field .....11 Other (specify) .....12	→705 →705																																													
704	Do you share this toilet facility with members of other household?	Yes .....1 No .....2																																														
705	Do you have any of the following amenities in your house Read each one	<table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr><td>1 Radio .....</td><td>1</td><td>2</td></tr> <tr><td>2 Television.....</td><td>1</td><td>2</td></tr> <tr><td>3 Mobile telephone.....</td><td>1</td><td>2</td></tr> <tr><td>4 Electricity .....</td><td>1</td><td>2</td></tr> <tr><td>5 Non-mobile telephone .....</td><td>1</td><td>2</td></tr> <tr><td>6 Refrigerator .....</td><td>1</td><td>2</td></tr> <tr><td>7 Table .....</td><td>1</td><td>2</td></tr> <tr><td>8 Chair.....</td><td>1</td><td>2</td></tr> <tr><td>9 Bed .....</td><td>1</td><td>2</td></tr> <tr><td>10 Sofa .....</td><td>1</td><td>2</td></tr> <tr><td>11 Computer.....</td><td>1</td><td>2</td></tr> <tr><td>12 Clock.....</td><td>1</td><td>2</td></tr> <tr><td>13 Fan.....</td><td>1</td><td>2</td></tr> <tr><td>14 Dhiki/janto.....</td><td>1</td><td>2</td></tr> </tbody> </table>		Yes	No	1 Radio .....	1	2	2 Television.....	1	2	3 Mobile telephone.....	1	2	4 Electricity .....	1	2	5 Non-mobile telephone .....	1	2	6 Refrigerator .....	1	2	7 Table .....	1	2	8 Chair.....	1	2	9 Bed .....	1	2	10 Sofa .....	1	2	11 Computer.....	1	2	12 Clock.....	1	2	13 Fan.....	1	2	14 Dhiki/janto.....	1	2	
	Yes	No																																														
1 Radio .....	1	2																																														
2 Television.....	1	2																																														
3 Mobile telephone.....	1	2																																														
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13 Fan.....	1	2																																														
14 Dhiki/janto.....	1	2																																														

N°	Questions and filters	Responses/ ..... Codes	Skip
706	If have mobile phone, ask:  Is your mobile phone a smart phone?	Yes.....1 No.....2 DK.....8	
707	If have mobile phone, ask:  What mobile service do you use?	NTC.....1 NCell.....2 Other.....3 DK.....8	
708	What type of fuel does your household mainly use for cooking?	Electricity.....01 Lpg.....02 Natural gas.....03 Biogas.....04 Kerosene.....05 Coal, lignite.....06 Charcoal.....07 Wood.....08 Straw/shrubs/grass.....09 Agricultural crop.....10 Animal dung.....11 No food cooked In household.....12 Other(specify).....13	
709	In this household, is food cooked on an open fire, a stove, or a chulo?	Open fire.....1 Stove.....2 Chulo.....3 Other (specify)_____ Probe for type.....4	
710	Do you have a separate room that is used as a kitchen?	Yes.....1 No.....2	
711	MAIN MATERIAL OF THE FLOOR.  <b>RECORD OBSERVATION</b>	Natural floor Earth/mud.....1 Dung.....2 Rudimentary floor Wood planks.....3 Palm/bamboo.....4 Finished floor Parquet or polished wood.....5 Vinyl or asphalt strips.....6 Ceramic tiles.....7 Cement.....8 Carpet.....9 Other(specify).....10	

N°	Questions and filters	Responses/ ..... Codes	Skip
712	MAIN MATERIAL OF THE EXTERIOR WALLS.  <i>RECORD OBSERVATION</i>	Natural walls No walls .....1 Cane/palm/trunks .....2 Mud/sand .....3 Rudimentary walls Bamboo with mud .....4 Stone with mud .....5 Plywood .....6 Cardboard.....7 Reused wood .....8 Finished walls Cement .....9 Stone with lime/cement .....10 Bricks .....11 Cement blocks .....12 Wood planks .....13 Other(specify) .....14	

**Thank you**

## STUDY TEAM

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## REFERENCES

- Ghar Ghar Ma Swasthya Project (2012), Family Planning (FP), Reproductive Health (RH), Maternal and Child Health (MCH), Disinfection of Drinking Water, and Menstrual Hygiene Baseline Knowledge, Attitudes and Practices Survey in 49 Hill and Mountain Districts, Ghar Ghar Maa Swasthya (GGMS) Project, FHI 360, Nepal.
- Ghar Ghar Ma Swasthya Project (2013), Family Planning and Diarrhea Knowledge, Attitude and Practices (KAP) in GGMS Project Districts, Nepal, Follow-up study, 2013, Ghar Ghar Maa Swasthya (GGMS) Project, FHI 360, Nepal.
- Ghar Ghar Maa Swasthya Project (2010), Performance-based Monitoring System, August 1, 2010- July 31, 2015, Ghar Ghar Maa Swasthya (GGMS) Project, FHI 360, Nepal.
- Khanal M. N., Shrestha D.R., Panta P.D., and Mehata S. 2013. Impact of Male Migration on Contraceptive Use, Unmet Need and Fertility in Nepal. Further analysis of the 2011 Nepal Demographic and Health Survey. Calverton, Maryland, USA: Nepal Ministry of Health and Population, New ERA, and ICF International.
- Macro International Inc. 2007. Trends in Demographic and Reproductive Health Indicators in Nepal. Calverton, Maryland, USA: Macro International Inc.
- National Demographic and Health Survey Nepal, (2011)  
[http://www.measuredhs.com/pubs/pdf/FR257/FR257\[13April2012\].pdf](http://www.measuredhs.com/pubs/pdf/FR257/FR257[13April2012].pdf)
- Population and Housing Census 2011 (NPHC 2011). National Report. November 2012. Central Bureau of Statistics (CBS). Kathmandu, Nepal,  
[http://unstats.un.org/unsd/demographic/sources/census/2010\\_phc/Nepal/Nepal-Census-2011-Voll.pdf](http://unstats.un.org/unsd/demographic/sources/census/2010_phc/Nepal/Nepal-Census-2011-Voll.pdf)