

## Voluntary Blood Donation Campaign by NACO

Reach \& Recall Study 2014

Reach and Recall Study of Voluntary Blood Donation Campaign by NACO © 2014 by FHI360

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## Foreword

It has been recognized world over that collection of blood from regular voluntary non-remunerated blood donors should constitute the main source of blood supply. From $54 \%$ in the year 2006-07, voluntary blood donation (VBD) increased to $79 \%$ in year 2010-11 and further to $84 \%$ in subsequent years.

Several IEC activities, including, two prominent pan India campaigns - "Little Girl" and "Four Drops", were aired through Television, Radio and Digital Cinemas for a period of 4 weeks during the months of September-October 2013 to promote public awareness on the need for voluntary blood donation. To understand the performance and impact of these two voluntary blood donation campaigns, a reach and recall study was conducted and it is heartening to know that;

- Respondents exposed to these campaigns donated blood themselves in greater proportion ( $17 \%$ ) than those who did not see/listen the campaigns ( $5 \%$ ).
- In general the recall of the messages in the urban areas is higher than in the rural areas.

I am sure that the results of this reach and recall study would not only help to understand the strerigths and weaknesses of these two campaigns, but will also show the way for developing communication strategies for promoting voluntary blood donation.

I would like to commend the IEC evaluation team at National AIDS Control Origanization (NACO) led by Dr Rajesh Rana, M\&E team at Improving Healthy Behaviors Program (IHBP) led by Ms Tara Sharma, CoP and Dr Subrato Mondal for putting their sincere efforts in bringing out this comprehensive evaluation report.

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New Delhi
May 12, 2014

(Dr Naresh Goel)

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## LIST OF ABBREVIATIONS

| AD | Advertisement | NACA | National AIDS Control Organization |
| :--- | :--- | :--- | :--- |
| HS | Annual Health Survey | NACP | National AIDS Control Programme |
| AIDS | Acquired Immune Deficiency <br> Syndrome | NGC | Non-Governmental Organization |
| BCSU | Blood Component Separation Unit | CBC | Other Backward Classes |
| PL | Below Poverty Line | Probability Proportionate to Size |  |
| BSD | Blood Storage Center | PSU | Primary Sampling Unit |
| FHI 360 | Family Health International | RTI | Reproductive Tract Infection |
| FRO | First Referral Unit | SC | Scheduled Caste |
| FSF | Female Sex Worker | SCR | Socio-Cultural Region |
| HIV | Human Immunodeficiency Virus | SEC | Socio Economic Classification |
| ICMR | Indian Council of Medical Research |  | Social and Rural Research Institute- |
| Indian Market Research Bureau |  |  |  |
|  | Information, Education, and | ST | Scheduled Tribe |
| Communication | TI | Sexually Transmitted Infection |  |
| IHBP | Improving Healthy Behaviors | TV | Television |
| Program | SAID | United States Agency for |  |
| MOHFW | Ministry of Health and Family |  | International Development |
|  | Welfare | UT | Union Territory |
| ISM | Men Who Have Sex with Men | VBD | Voluntary Blood Donation |
| VAC | National AIDS Committee |  |  |

## EXECUTIVE SUMMARY

Blood donation is when a person voluntarily gives blood for transfusions or to be made into biopharmaceutical medications. Whole blood or even specific components can be donated. Blood may be needed for people after an accident, as well as for surgery and cancer treatment, complicated pregnancies, anemia, and regular transfusions for conditions such as thalassemia and sickle cell disease.The annual blood requirement in India is estimated to be 80 lakh units in 2012-2013. However, with a population of over 1 billion, India still faces a shortage of safe blood. The blood bank services sector is fragmented in India, with the public sector, Indian Red Cross Society, Non-Governmental Organization (NGOs), and the commercial sectors managing the blood banks.

Since it is desirable to switch over to Voluntary Blood Donations (VBD) for regular supply the National AIDS Control Organization (NACO), Red Cross, and other blood donor organizations conducted activities to raise awareness and promote VBDs.

## REACH AND RECALL STUDY

A reach and recall study measures the efficacy of a communication campaign. The main objectives in general are to understand how many people were exposed to the campaign (reach), and of those exposed, how many were able to remember the key messages (recall).

## THE STUDY AND SETTINGS

The study Reach and Recall of VBD was conducted by the Improving Healthy Behaviors Program (IHBP) in collaboration with NACO, Ministry of Health and Family Welfare (MOHFW) in the states of Assam, Maharashtra, Odisha, Tamil Nadu, and Uttar Pradesh and covered a total of 20 districts. A total of 104 rural Primary Sampling Units (PSUs) and 46 urban PSUs were selected for the study. The study was executed by the Social and Rural Research Institute (SRI-IMRB).

## MEDIA CAMPAIGN INTERVENTION BY NACO FOR VBD

This study aims to assess the reach and recall of ads of the VBD campaign run by NACO in the five study states. The campaign was aired through television (TV), radio, and digital cinemas, and was an all-India campaign.

The study assessed reach and recall of the following four media spots developed by NACO:

1. Little Girl Campaign on TV
2. Little Girl Campaign on radio
3. Four Drops Campaign on TV
4. Four Drops Campaign on radio

## TARGET GROUPS

The target population was selected based on a listing exercise conducted in the PSUs, which aimed to locate eligible respondents for the study. Males and females from18-65 years were included as a part of the final sample to be interviewed. In households with more than one eligible respondent, one person was selected using a kish grid (pre-assigned table of random numbers).

## DATA COLLECTION

Data were collected for all 150 selected locations (104 villages and 46 wards). A total of 3,148 respondents were interviewed, including 1,565 male and 1,583 female respondents. Data collection was done though a structured questionnaire for both male and female respondents. To collect the data in the field, all of the enumerators and supervisors were trained extensively for five days in the presence of research teams from SRI-IMRB and also technical specialists from NACO and the IHBP team.

## MEASUREMENT

The study assessed the reach and recall of selected advertisements (ads) developed by NACO on VBD in the five study states. Reach of the campaign was measured in the aggregate as all who had seen any of the media spots. The individual media spots were also measured as to whether respondents were able to recall any of the two key messages of the ad.

Other demographic information such as age, education, occupation, caste, and religion were collected. Data related to VBD such as current practice of blood donation, intent to go for blood donation in the future, and attitudes toward blood donation were also measured.

## KEY RESEARCH FINDINGS

This subsection presents a snapshot of the key research findings for the study based on the information collected from 3,148 respondents across rural and urban locations. Data were collected for similar indicators with both men and women in order to have a clear understanding of differences among groups.

## RESPONDENT CHARACTERISTICS

The age of the male respondents was skewed toward the higher age bracket as compared with female respondents. The median age of the male respondents was close to 40 years ( $S D=12.0$ ), while the age was approximately 38 years for females ( $\mathrm{SD}=11.6$ ). Close to $81 \%$ of the respondents belonged to the Hindu religion and approximately $15 \%$ were Muslim. As a proxy for poverty level of the respondents, it was found that $27 \%$ of the sample had a card for Below Poverty Line (BPL). Approximately $21 \%$ of respondents were illiterate; close to $9 \%$ had completed school though Class XII, and around 16\% were educated through Class $X$. The large majority of respondents ( $86 \%$ ) were married and living with spouses. Around $60 \%$ of the families were nuclear.

## BLOOD DONATION PRACTICES

Close to $8 \%$ of the respondents had family members who had ever donated blood ( $13 \%$ in urban areas and $5 \%$ in rural areas). Approximately $9 \%$ of respondents had ever donated blood themselves; $16 \%$ in urban areas and 5\% in rural areas. The proportion of respondents who ever donated blood increased with increasing education levels. Ever donating blood was reported by $1 \%$ illiterate respondents as compared to $28 \%$ respondents who were graduates and above ( $37 \%$ males and $13 \%$ females). The main reasons respondents cited for abstaining from blood donation were fear of feeling weak and never having been approached to donate blood before.

## MEDIA EXPOSURE AND HABITS

Respondents' media consumption habits were collected. The highest penetration of any media exposure was for TV; $61 \%$ of respondents watched TV at least once a week, with the differentials being higher in the urban areas (86\%) and among males (63\%). Soaps/serials and news were the main attractions viewed on TV overall. Entertainment channels like Star TV, Zee TV, and Colors were more popular among females, while news channels such as AajTak were watched more by males.

Radio listenership was found to be low across all states. Among those respondents who regularly listened to radio, Radio AIR was the most popular channel.

About one-third of respondents read newspapers at least once a week and one-fifth (22\%) read newspapers on daily basis. Overall, reading magazines ( $\sim 7 \%$ ) was the lowest among the media exposure the study examined. Only one-tenth had access to the Internet. This was highest in the state of Maharashtra, where a fifth had access to Internet.

## REACH AND RECALL OF BLOOD DONATION CAMPAIGNS

Approximately one-third (32.2\%) of respondents had saw or heard a media spot of the VBD media campaign aired by NACO. This implies that close to one-third of the population in these districts under the study were reached by the VBD media campaigns (since the data were weighted at the district level). Relatively speaking, the reach was found to be higher for Maharashtra (41\%) and Uttar Pradesh (39\%) and lower for Tamil Nadu (14\%). In the aggregate, close to $26 \%$ respondents could spontaneously mention any VBD ad ( $n=752$ ). Of these, about half mentioned the Little Girl ( $n=361$ ) ad but only $16 \%$ mentioned Four Drops ( $n=120$ ).

When examining reach differentials by location more than two-fifths of respondents in urban areas and around one-third in rural areas were reached overall by at least one NACO ad about VBD.

Among those who were exposed to the campaigns, $91 \%$ could recall at least one message or tagline correctly.

## IMPACT OF MASS MEDIA CAMPAIGN

Results from the study show that those exposed to the mass media campaign on VBD donated blood themselves in greater proportion (17\%) than those who did not see or hear the ads (5\%) ( $p<0.00001$ ). In general, at rend was seen that showed increasing education levels and increasing blood donation. It was also found that exposure to the NACO mass media campaign on VBD was significantly associated with increased intent to donate blood in future. Close to $67 \%$ of respondents exposed to the campaign intended to donate blood in the future, compared to $27 \%$ of non-exposed respondents ( $p<0.00001$ ). About $85 \%$ of the respondents exposed to VBD ads said that they feel motivated to act upon the message (that is, donate blood).

The findings from the study suggest that in general, those who were exposed to the VBD messages NACO delivered through any mass medium (TV or radio) had greater behavioral intentions and more supportive attitudes toward VBD than those who were not exposed to the campaign.

## CHAPTER 1

## INTRODUCTION AND BACKGROUND

The blood donation rate in high-income countries is 39.2 donations per 1,000 population, 12.6 donations in middle-income countries, and 4.0 donations in low-income countries.


## CHAPTER 1



## INTRODUCTION AND BACKGROUND

### 1.1 BLOOD DONATION—AN INTRODUCTION

Blood cannot be manufactured; it can only be obtained from donors. No substitute for blood with all its properties that has been developed. Blood donation is when a person voluntarily gives blood for transfusions or to be made into biopharmaceutical medications. Whole blood or even specific components of it can be donated.

Blood may be needed for people after accidents, for surgery and cancer treatment, complicated pregnancies, anemia, and regular transfusions for conditions such as thalassemia and sickle cell disease.

Potential donors are screened and if found eligible to donate, the blood is tested following donation. The blood collected is then processed and stored.

SCREENING: Potential donors are asked questions about their medical history and given a physical examination to confirm that the person is eligible to donate. The screening also ensures that the donation does not pose a risk to the donor's health or that of future recipients. Donors are checked for any symptoms of diseases that could be transmitted through blood transfusions, such as HIV.

BLOOD TESTING: Blood, once donated, is then tested to check the blood type and for diseases, including some Sexually Transmitted Infections (STIs). This is done to ensure the safety of blood donated to protect recipients from any health risks. This information is kept confidential unless the donated blood tests positive for any ailment, in which case, the donor is informed.

BLOOD STORAGE: Blood can be stored as whole blood or separated into components such as platelets and plasma. Recipients sometimes do not require whole blood and need only certain components. The shelf life for whole blood and separated components varies. Although whole blood can be kept for 35-42 days, platelets can be stored for only 5 days. Thus, it is not only essential to have a regular supply of blood, but also to have proper management to ensure that no collected blood is wasted.

## People who donate blood can be categorized into three types:

1. Voluntary Blood Donors: "Voluntary" blood donation refers to "unpaid, non-remunerated" blood donation. A voluntary blood donor is a person who gives blood, plasma, or other blood components of his or her own free will and receives no payment for it, either in cash or inkind, the latter of which could be considered a substitute for money.
2. Replacement Donors: A member of the family or a friend of the patient who donates blood in replacement of blood needed for the particular patient. This may involve a hidden paid donation system in which the donor is paid by the patient's family.
3. Professional Donors: A person who donates blood in exchange for money or other form of payment. Professional blood donation was banned in India from 1st January 1998.

### 1.2 UNDERSTANDING OF THE BLOOD DONATION SCENARIO

The first reported case of HIV in India was in 1986 among female sex workers (FSW) in Chennai. By the 1990s, cases were reported from across the country. By this time, the virus had spread to the general population and was no longer restricted to high risk populations, which included FSW, Men who have Sex with Men (MSM), Injecting Drug Users (IDU), truckers, migrants, and transgendered individuals.

Though the initial cases of HIV were probably transmitted through unprotected heterosexual intercourse (since they were identified within FSWs), other causes of transmission were recognized, such as transmission from parent-to-child, through use of infected needles or syringes, homosexual intercourse, and through infected blood.

To limit the spread of HIV/AIDS, the AIDS Task Force was set up in 1987 under the aegis of Indian Council of Medical Research (ICMR) and the National AIDS Committee (NAC). However, because of increased infections and greater incidence within the general population, a more focused approach was needed. Thus, NACO was established in 1992.

NACO, with the support of The World Bank, launched a program called the National AIDS Control Programme (NACP), in phases with specific targets. Currently, it is in the fourth phase, and has demonstrated significant achievements over the years. Under this program the main aims were to prevent HIV transmission, decrease the morbidity and mortality associated with HIV, and minimize the socio-economic impact of HIV infection.

Below is a summary of the major accomplishments of the four phases of NACP.
NACP I (1992-1998)

- Awareness-Raising: It was essential to generate public awareness about HIV/ AIDS, which was one of the first steps undertaken to reach out to various groups using different media.
- Providing Safe Blood: The National Blood Transfusion Policy was prepared and guidelines were issued to cover all aspects of blood donation, including testing and storage.
- Strengthening Blood Bank Systems: Funds were provided to modernize existing blood banks, set up zonal blood testing centers, and component separation units.
- HIV Prevention: NACP I sought to promote the use of condoms, improve their quality, and increase availability as an effective mechanism in preventing HIV transmission.
- Interventions: Attempts were made to set up treatment facilities and the model of continued care for people with AIDS. Targeted interventions were also introduced to educate and promote condoms to high-risk behavior groups.


## NACP II (1999-2006)

- Targeted Interventions: NACP II focused on targeted interventions to change the behavior among high-risk groups and set up more than 1,000 targeted interventions.
- Establishment of Counseling and Testing Centers: Those at risk could find out their status and get further information.
- Safe Blood: Providing safe blood was one of the targets of NACP II. The number of licensed blood banks increased to 1,230 including 82 blood component separation centers. Blood banks, apart from HIV testing, were supposed to test all the donated blood for Hepatitis C.


## NACP III (2007-2012)

- Movement to Reverse the Epidemic: The main goal of NACP III was to reduce the reverse the epidemic in India. The main objectives were targeted interventions, including link worker schemes, management of STIs and Rreproductive Tract Infections (RTIs), condom promotion, blood safety, prevention of parent-to-child transmission, and generating awareness.
- Blood Safety: The main objectives were to reduce transfusion rates associated with HIV transmission to $0.5 \%$ and ensure the availability of safe and quality blood.


## NACP IV (launched in 2014)

The main goals of NACP IV are:

- Intensify and consolidate prevention services with a focus primarily on high-risk groups and vulnerable populations, and secondarily on the general population.
- Increase information, education, and communication (IEC) services with a focus on behavior change.
- Expand access and promote comprehensive care, support, and treatment.
- Build capacities at national, state, district, and facility levels.
- Strengthen strategic information management systems.

The annual blood requirement in India was estimated to be 80 lakh units in 2012-2013. With a population of over 1 billion, however, India faces a shortage of safe blood. The blood bank services sector is fragmented with the public sector, Indian Red Cross Society, Non-Governmental Organization (NGOs), and commercial sectors managing the blood banks.

The ratio of usage of blood components to whole blood is 15:75, while this ratio globally is at 90:10. Many factors contribute to this difference between India and the global average. Many blood banks in India lack the necessary facilities to separate blood into components and as a result, they issue whole blood. This can lead to a shortage of components and can also cause harm to the recipient, since reactions during transfusions are more common with whole blood transfusions.

As per NACO protocol, blood banks are required to keep $25 \%$ of blood collected as buffer to be used in case of emergencies; however, only about $20 \%$ of blood banks maintain this buffer stock. Blood banks rely heavily on replacement donors, thus shifting the responsibility to find donors on family and friends, which can lead them to become professional donors or middlemen who belong to a high-risk group since they often do not provide correct information about their health and medical history.

Awareness about the importance of blood donation and especially VBD still remains low. Many people believe they will become weak and anemic if they donate blood and that women are weaker hence, they should not donate. This could be a possible reason why almost $94 \%$ of all donations in 2008 were by men.

To ensure a safe blood service, all donated blood needs to undergo a series of tests to ensure that it is safe for transfusion. In India, however, 100\% of laboratory tests are not possible because of lack of adequate facilities in many blood banks. Thus, it becomes essential to ward off professional and even replacement donors and shift to VBDs.

### 1.3 ASSESSMENT OF THE VOLUNTARY BLOOD DONATION SCENARIO

To bridge the gap between need and availability of safe blood it is important to increase the proportion collected from voluntary, regular donors from low-risk populations. Voluntary and repeat blood donors should make up the bulk of donations for any country.

NACO-supported blood banks are present in around 600 districts in India. There are around 1,118 NACO-supported blood banks along with 175 BCSUs and 34 Model Blood Banks.

Between 2007 and 2012 (during NACP III), the availability of safe blood increased from 44 lakh units in 2007 to 93 lakh units in 2012. In this period, HIV sero-reactivity decreased from $1.2 \%$ to $0.2 \%$ in NACO-supported blood banks. Approximately 67.56 lakh units of blood were collected in 2012-2013 across the country, of which 38.68 lakh units were collected at NACO-supported blood banks.

## Status of VBD

Of all the units of blood collected in NACO-supported blood banks in2006-2007,54.6\% were through VBD. The proportion of voluntary donations increased steadily to $59.1 \%$ in $2007-2008,66.4 \%$ in 2008-2009 and 72.1\% in 2009-2010.

In 2010-2011 the proportion of voluntary blood donations increased to 79.4\% and 83.5\% in 20122013. From 2013-2017, NACO aims that voluntary blood donation will rise to $90 \%$.

Because of the need to switch to VBD for regular supply, NACO, Red Cross, and other blood donor organizations conducted activities to raise awareness and promote VBD.

## The Approach

To increase the supply of safe blood the following strategies were employed:

- A main task was to increase the supply of blood from regular non-remunerated voluntary blood donors to meet the blood requirement for the country.
- To move toward appropriate use of blood, it is essential to practice component separation and increase their availability to promote rational use of blood. NACO worked to provide the necessary health care provider facilities to meet this objective.
- Improving access to safe blood was another key task for which a good network and coordination was promoted in blood transfusion services.
- Improving quality management systems focused on guaranteeing safe and quality blood.

Andhra Pradesh, Maharashtra, Tamil Nadu, Gujarat, Goa, Tripura, Mizoram, Chandigarh, Haryana, Kerala, Madhya Pradesh, Puducherry, and Sikkim were categorized as high-performing states in VBD. Assam, Delhi, Manipur, and Meghalaya were categorized as low-performing states. The task is to maintain and improve the success achieved by the good performing states and raise the VBD in low-performing states.

## Key Strategies

Apart from increasing the supply of safe and quality blood from voluntary donors it is essential to improve the facilities and supply chain to work toward a system for rational use of available blood and reduce waste.

- MODEL BLOOD BANKS: Model blood banks were created under NACP II to improve the blood transfusion services; 10 model blood banks were created in eight low-performing states. The target set for NACP III was to create such blood banks in the remaining 24 states/ Union Territories (UT). By the end of NACP III, 34 model blood banks were functioning in
the country. Bloodmobiles have also been provided to each model blood bank to increase voluntary collections in the nearby areas.
- BLOOD COMPONENT SEPARATION UNITS (BCSU): One of the key tasks was to promote rational use of blood. To fulfill this need, 82 NACO-supported BCSUs were created during NACP I and II, which was increased to 175 by the end of NACP III. The proportion of units of blood sent for separation increased from $47 \%$ to $51 \%$ by the end of December 2012.
- NETWORK OF BLOOD BANKS: A good network of blood banks across the country is essential. One of the tasks undertaken was to ensure presence in every district.
- DISTRIBUTION: To make safe and quality blood available to the first referral units (FRUs), blood storage centers (BSCs) have been created and at present there are 745 BSCs functioning in India. A linkage plan was created for the BSCs and FRUs. Apart from storage, a focus on transportation is essential, since it must be done under specific conditions. To facilitate this, 250 refrigerated blood transportation vans were provided under NACP III.

All these steps and guidelines work toward improving the supply of safe and quality blood from regular voluntary donors. The logistics for supply chain management after collection also must be a focus to ensure that the available units of blood are utilized rationally to minimize waste.

### 1.4 ROLE OF MEDIA CAMPAIGNS

Mass media are widely used for disseminating information, generating awareness, dispelling myths, and changing attitudes to move toward behavior change and can be effective in disseminating specific and focused information to a larger audience, repeatedly, over time. Because of the vast number of campaigns in today's environment, however, the campaigns have to compete for reach and have a clutter-breaking ability for the viewer to retain their messages.

It is essential to give wide publicity to VBD activity through all available mass media channels, such as newspapers, and TV, including local cable channels, and radio, so that people understand the importance of blood donations, requirement of blood, collection from voluntary donors, risk of transmitted diseases through transfusion, and the use of safe blood.

Mass media work through direct as well as indirect paths. Directly it appeals to cognitive or emotional sides. It also works indirectly through word of mouth when the audience's social network discusses these issues. Thus, mass media can play an important role for health related campaigns. ${ }^{1}$

Various studies have been conducted in the past in maternal and reproductive health that showed a positive relationship between exposure to a mass media campaign and behavior change. The study hypothesizes that those who were exposed to the campaign will have greater improved attitudes and practices related to VBD than those who were not exposed.

## Improving Healthy Behaviors Program

The USAID-funded Improving Healthy Behaviors Program (IHBP) in India is implemented by FHI360 and its partners. The project provides technical assistance to develop sustainable national, state, and district institutional capacity to design, deliver, and evaluate strategic evidence-based health communication programs that will:
(1) Increase knowledge and attitudes of individuals, families, communities, and health providers about health.

[^0]2) Promote an environment where communities and key influencers support positive health behaviors and reduce barriers of vulnerable populations (such as, women, persons living with HIV/AIDS, or helping tuberculosis patients to demand and access health services).

NACO requested that IHBP conduct a reach and recall study of their mass media campaigns on VBD, which were rolled out through TV, radio, and digital cinema halls.

To understand the performance and impact of the VBD campaign, a reach and recall study was conducted in the states of Assam, Maharashtra, Odisha, Tamil Nadu, and Uttar Pradesh.

## Ads Evaluated in the Study

NACO launched a mass media campaign on VBD with the primary objective to encourage the lowrisk population to donate. The two ads which were a part of this campaign were Little Girl and Four Drops/Macchar. These ads were rolled out through TV, radio, and digital cinema halls and were a pan-India campaign. A reach and recall study was conducted to evaluate the performance of this campaign.

Reach of both the ads, which were part of the overarching VBD campaign, were checked individually. Since the ads were aired through TV and radio, reach of both the media was evaluated. The ads evaluated through the study are described below.

## 1. Little Girl Ads (Component 1 of VBD Campaign)

- TV Ad
- Radio Ad


This ad shows a little girl going from table to table in a restaurant thanking people. When the man asks her the reason for thanking him, she replies that she has thalassemia and every month people like him donate blood and help her, but since she does not know who they are she says a thank you to everyone. The man replies that he has never donated blood, so the girl smiles and says "for next time."

## 2. Macchar/Four Drops Ads (Component 2 of VBD Campaign)

- TV Ad


This ad begins with one friend asking the other two to come for blood donation because one of their friends has dengue and needs blood. Then they talk about how one donation can help four people because the platelets would help their friend and the rest of the blood could be used for three other people. One friend then calculates how he saved 12 lives last year.

### 1.5 RATIONALE OF THE STUDY

It is essential to understand the effectiveness of any intervention and also evaluate its impact on the target audience. The results will then help programmers to understand the strengths and weaknesses of the campaign and can become the starting point for revising the campaign strategy, further testing, and scale up. This can also become a benchmark for setting targets for future campaigns.

NACO is committed to bridge the gap in the availability of blood and to improve the quality of blood under NACP-III. To continue the gain made under NACP-III, it was planned that the VBD rates be raised to $90 \%$.

The media ads were aired for four weeks September and October 2013. Therefore, at this crucial juncture (the study period December 2013-January 2014), it is imperative to understand how many people were reached and the recall levels of the key messages of the ads among the target audience.

The study was undertaken to assess the reach and recall of VBD mass media campaigns, which were implemented by NACO, MOHFW.

### 1.6 PROJECT SETTINGS: STATE SNAPSHOTS

The study states were Assam, Maharashtra, Odisha, Uttar Pradesh, and Tamil Nadu. Among these, Uttar Pradesh is the largest in terms of population and Assam is the smallest. Maharashtra has the highest literacy levels (73\%) while Uttar Pradesh has the least with 57\% (Census, 2011) (see Table 1.1).

| Indicators | All India | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Population* (In millions) | 1,210.6 | 31.2 | 112.4 | 41.9 | 72.1 | 199.8 |
| Rural Population* (In millions) | 833.5 | 26.9 | 61.6 | 34.9 | 37.2 | 155.3 |
| Urban Population* (In millions) | 377.1 | 4.4 | 50.8 | 7.0 | 34.9 | 44.5 |
| Sex Ratio(Females per 1,000 Males)* | 943 | 958 | 929 | 979 | 996 | 912 |
| Child Sex Ratio (Females per 1,000 Males)* | 919 | 962 | 894 | 941 | 943 | 902 |
| Population Density/ km ${ }^{2 * *}$ | - | 340 | 314 | 236 | 478 | 689 |
| Literacy* | 63 | 61 | 73 | 64 | 72 | 57 |
| Male Literacy* | 70 | 66 | 78 | 71 | 78 | 65 |
| Female Literacy* | 56 | 56 | 67 | 56 | 66 | 48 |

Maharashtra has the highest levels of HIV prevalence among the states selected for the study followed by Uttar Pradesh (see Table 1.2). Maharashtra also has the highest number of integrated counseling and testing centers (ICTC) and blood banks (661), followed by Tamil Nadu (393).

| Table 1.2: Key Indicators of the Selected States |
| :--- |
| \begin{tabular}{\|l|r|r|r|r|r|r|c|}
\hline
\end{tabular} |
| Indicators All India |
| HIV Prevalence\# |

## Source:

* Census 2011-PCA data
** Census of India 2001-Density of Population-Chapter 5
$\wedge$ http://cdsco.nic.in/html/BloodList.html
\# NACO-Department of AIDS Control - Annual Report 2012-13


## CHAPTER 2

## STUDY OBJECTIVES, SAMPLE, AND METHODOLOGY

It discusses the research methodology and related aspects of district, target audience, and respondent selection.


## CHAPTER 2



## STUDY OBJECTIVES, SAMPLE, AND METHODOLOGY

### 2.1 OBJECTIVES OF THE STUDY

The study's primary objective was to measure the reach and recall of the VBD campaign in the five study states of Assam, Maharashtra, Odisha, Uttar Pradesh, and Tamil Nadu. It aims to confirm the hypothesis that "respondents with more exposure to the media campaigns have higher recall and intention to act upon the messages compared to those with no or poor campaign exposure."

The key research objectives of the study are:

- To measure the reach and recall of the campaign messages, message comprehension, and when relevant, reactions to other aspects of the campaigns, including liking and empathy with the campaign characters.
- To measure differences in knowledge, attitudes, and beliefs related to VBD from the respondents exposed and not exposed to the specific campaign.
- To explore the respondents' intention to act upon the campaign's messages.


### 2.2 RESEARCH DESIGN AND METHODOLOGY

The study follows a cross-sectional research design. It discusses the geographical coverage, target respondents, and the research process used for the purpose of the study.

## Sampling Design

The sample size was computed as $50 \%$ based on the expected reach and access of all media (TV, radio, and digital cinemas). Since the information regarding reach of all media together was not available, the assumption of $50 \%$ was intended to yield the maximum sample size. The sample size ( $n$ ) required to assess change was computed based on the following formula and key parameters:


Where, in this instance:
$\mathrm{n}=$ required sample size
z $\quad=$ confidence level at 95\% (standard value of 1.96)
p = estimated reach of campaign in the project area ( $50 \%$ for all media)
$\mathrm{m}=$ margin of error at $5 \%$ (standard value of 0.05 )
deff $=$ design effect (considered at 1.5 for multistage sampling)
c = contingency/non-response rate (considered as 10\%); non-response would also compensate when respondents did not give consent to participate in the study

The statistical significance of the findings at this category level was kept at a $5 \%$ margin of error. The study was designed to provide estimates at the state level.

The required sample size per state was calculated to be 634. This was rounded up to 660 for operational and logistical considerations of the study. The sample of 660 per state was distributed across males and females from 18-65 years old.

## Geographical Coverage

As per the Census of India, the country has been divided into six zones (Northern, Southern, Eastern, Western, Central, and North-East). There are nine states in the Northern region, two in the Central region, six in the Eastern region, seven in the North Eastern region, four in the Western region, and seven in the Southern region.

Due to the close proximity of the Northern and Central regions, and similarity of demographics and culture within these two zones, they were joined for this study. Thus, five zones were covered. Because VBD was intended as an all-India campaign, geographic representation from all the five zones was maintained.

The study was conducted in five states, one from each zone selected through random sampling (see Figure 2.1). Districts are categorized by Socio-Cultural Regions (SCR) within the state. These have higher socio-cultural homogeneity and thus provide broader and more diversified sample selection within a state. In each of the states, a minimum of three districts that align with the SCRs of the state were selected.

The details of the selected states and districts are provided in Table 2.1

| State | Number of Districts |  | of Districts |
| :---: | :---: | :---: | :---: |
| Assam | 3 | Kamrup Metropolitan |  |
|  |  | Nagaon |  |
|  |  | Cachar |  |
| Maharashtra | 5 | Sangli | Parbhani |
|  |  | Nandurbar | Nagpur |
|  |  | Ratnagiri |  |
| Odisha | 4 | Sambalpur | Kendujhar |
|  |  | Jagatsinghapur | Nabarangapur |
| Tamil Nadu | 3 | Dindigul |  |
|  |  | Erode |  |
|  |  | Krishnagiri |  |
| Uttar Pradesh | 5 | Mirzapur | Hamirpur |
|  |  | Kannauj | Kanpur Nagar |
|  |  | Shahjahanpur |  |

Figure 2.1: States Selected for the Reach and Recall Study


Across the five states, the study was conducted in 20 districts, with a minimum of three districts in each state by randomly selecting one district within each SCR of the state.

## Study Inclusion Criteria and Target Population

The study included both males and females between 18 and 65 years of age.
This study excluded randomly selected households in which either of the following two conditions were met: a) couples where either the wife or the husband suffered from physical or cognitive disabilities that would prevent their participation in the study, or b) the potential respondent did not consent to participate in the study.

## Sampling Methodology

A multi-stage approach was adopted to reach the desired target respondents.
Step-1: Selection of State: Out of the five zones for the study, one state was selected using stratified
random sampling from each zone. In each zone (strata) the states were first arranged in ascending order of population and a serial number was assigned for each state. One state from each zone was selected using random number tables.

Step-2: Selection of district: In each of the selected states, districts were randomly selected from each of the SCRs with a minimum cap of three districts in each state. More than three districts were selected in states that have more than three SCRs (by randomly selecting one district from each SCR).

Step-3: Selection of the PSUs: The sample was spread across 30 PSUs in each state distributed across urban and rural PSUs proportionately. These PSUs were wards in urban areas and villages in rural areas. They were selected using a probability proportionate to size (PPS) sampling methodology from Census 2011 sampling frames. From these selected PSUs, an equal number of PSUs were selected for female and male surveys. PSUs were arranged in ascending order of population. The required number of male and female PSUs were further selected using systematic random sampling.

Step-4: Sampling of the households: Detailed sampling frames were generated through mapping and listing. From each PSU, 22 households were selected through this process.

For the household listing exercise, trained investigators went to the house in selected clusters of selected PSUs and collected the basic household listing information. For PSUs with fewer than 50 households, adjoining PSUs were grouped and then the process of segmentation was followed. At the time of household listing exercise, certain details to ascertain eligibility were recorded. This information was used to prepare the sampling frame from which the eligible men and women were selected and approached for the interviews. If a household had more than one eligible respondent, only one was selected using the random number tables.

## Sample Size and Distribution

A total of 150 PSUs were selected across the five study states. A total of 3,148 interviews were conducted in Assam, Maharashtra, Odisha, Uttar Pradesh, and Tamil Nadu in the months of December 2013 and January 2014.The state-wise sample distribution is shown below.

| Particulars | States |  |  |  |  |  |  |  |  |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Assam |  | Maharashtra |  | Odisha |  | Uttar Pradesh |  | Tamil Nadu |  | Total |  |
|  | P | A | P | A | P | A | P | A | P | P | P | A |
| No. of Districts | 3 | 3 | 5 | 5 | 4 | 4 | 5 | 5 | 3 | 3 | 20 | 20 |
| No. of PSUs | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 150 | 150 |
| No. of Rural PSUs | 26 | 26 | 16 | 16 | 24 | 24 | 22 | 22 | 16 | 16 | 104 | 104 |
| No. of Urban PSUs | 4 | 4 | 14 | 14 | 6 | 6 | 8 | 8 | 14 | 14 | 46 | 46 |
| Gender |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 330 | 326 | 330 | 295 | 330 | 329 | 330 | 306 | 330 | 309 | 1,650 | 1,565 |
| Female | 330 | 323 | 330 | 305 | 330 | 330 | 330 | 313 | 330 | 312 | 1,650 | 1,583 |
| Total | 660 | 649 | 660 | 600 | 660 | 659 | 660 | 619 | 660 | 621 | 3,300 | 3,148 |
| Location |  |  |  |  |  |  |  |  |  |  |  |  |
| Rural | 572 | 563 | 352 | 313 | 528 | 527 | 484 | 456 | 352 | 290 | 2,288 | 2,190 |
| Urban | 88 | 86 | 308 | 287 | 132 | 132 | 176 | 163 | 308 | 331 | 1,012 | 958 |
| Total | 660 | 649 | 660 | 600 | 660 | 659 | 660 | 619 | 660 | 621 | 3,300 | 3,148 |

Note: 'P': Planned sample, 'A': Achieved Sample

### 2.3 DATA COLLECTION AND OUTCOME MEASURES

All of the study operations like pre-testing the questionnaire, field training (including research ethics), data collection, data entry, data analysis, and report writing were managed by the research agency with oversight provided by IHBP. Prior to data collection, all enumerators and supervisors were trained extensively for five days in the presence of research teams from SRI-IMRB and also technical specialists from the IHBP team. All of the participants in the study were given information about the study objectives and study design. Informed consent was also obtained from each participant if they agreed to participate in the study.

## Survey Instrument

Considering the key objectives as described above, a structured questionnaire was designed with special provision to record open-ended responses wherever required was used. The questionnaire was translated into the regional languages (Assamese, Marathi, Odiya, Hindi, and Tamil) and a bilingual version with English followed by the regional languages was used for data collection.

## Outcome Measures

Measuring the reach and recall of the VBD campaign was the primary objective of this study. For the purpose of the study the reach and recall of the TV and radio spots of each of the Little Girl Campaign and the Four Drops were measured. Among other indicators studied were socioeconomic and demographic characteristics, motivation and intention to act post exposure to the campaign, knowledge of blood donation norms, blood donation practices, and attitudes toward blood donation.

Reach of the campaign was measured as the exposure of the respondents to the TV and radio spot of both the campaigns, thus four spots in all. First, the respondents were asked to mention any ad related to VBD that they have been exposed to, without using any aids. To ascertain the reach, the respondents were shown the storyboards of the TV spots of both the campaigns and the jingle of the radio ad was played for the respondent using an mp3 player. They were then asked if they can identify ever watching or hearing these ads. If the respondent had seen or heard any of the spots, either spontaneously or after the aid was used, it was counted as reach for that particular spot. The overall reach of the campaign was also calculated by measuring the number of people who had seen either of the spots. The individual campaign reach was also calculated using the same methodology for the two campaign spots.

Although aids were used to prompt the respondents, it was ensured that they are exposed only to the storyboard or jingle of the ads and not to the tagline or takeout of the ad.

For each of the spots that the respondent had reported to have seen, the respondent was further asked to recall the key message or tagline of the spot. If they could recall at least one of the key messages or tagline of the spot then this was counted as correct recall for the spot. The overall correct recall of the campaign was arrived at by using the above described method. Apart from reach and recall, their opinion on other aspects of the ad such as likeability, informativeness, level of motivation, and so on, were also taken.

Awareness of the concept of blood donation and the individual types was checked. Knowledge of prescribed norms of blood donation was evaluated through questions such as "According to you, at what age do you think a person can start donating blood?" and "According to you, who can donate blood?"

Respondents' blood donation practices and intention to donate in the future were captured through the survey instrument. Respondents were asked to state their reasons for not donating blood, where applicable. In addition to this, media habits pertaining to TV, radio, newspaper, magazines
and Internet were captured. The attitudinal behavior of the respondents interviewed was measured through a series of attitudinal statements on a five point Likert Scale ( $1=$ completely agree, 2=agree, $3=$ neither agree/nor disagree, $4=$ disagree, $5=$ completely disagree).

## Pre-testing the Questionnaire

Prior to undertaking the main fieldwork, the translated versions of the questionnaire were pre-tested in real field settings. The pre-test was used to gather information on the following points:

- Flow of the questions
- Ease in understanding the questions by the respondents
- Ease in administering the questionnaire
- Comprehensiveness in terms of information coverage
- Testing of the language used

The pretest was conducted at a different location from the main survey. After the pre-test, the findings from the various locations were collated and revisions were made to the questionnaire.

## Training the Investigators

A two-day centralized training for all state-level trainers was conducted in Delhi in the presence of technical specialists from IHBP. For every four investigators there was one supervisor whose primary role was to oversee the performance of the investigators, and to ensure adherence to the research protocol like sampling and ethics.

The following topics were covered during the centralized training:

- Overview about blood donation: The investigators were briefed about blood donation, its types, and prescribed norms of blood donation. This was followed by a discussion on the process of blood donation, the myths, and advantages.
- Briefing on the objectives of the study: Post introduction there was a session on the reasons for the study and understanding the key objectives.
- Briefing on the sampling methodology: This was followed by a discussion on target group, sampled districts, and sample size.


## - Briefing on mapping and listing methodology:

- Maps - The first task for the investigators was to attempt to procure the urban ward maps from the necessary authorities. Investigators were briefed on the complete process of preparing maps of the entire PSU through conversations with key informants and a transect walk. A step-by-step process was explained to them to ensure that a standard methodology was followed. The focus was to ensure that no area was left out during mapping and also the correct number of households was mentioned in each of the natural habitations.
- Segmentation - The investigators were briefed that after ascertaining the number of households present in each of PSU, the PSU would need to be divided into a specific number of segments depending on the total number of households. Post segmentation, a specified number of segments were to be selected based on the random number tables.
- Listing of Households - Post discussion on segmentation, the investigators were briefed about the listing process to be followed to come up with a roster of households to be
visited, ensuring that no household that was identified as part of the segment should be left out. The importance of preparing accurate maps along with mentioning the structure numbers on the maps as well as the structures was explained.
- Transfer of information: The tasks which were part of the listing and main survey, teams were segregated and discussed. To make sure information was clear and accurate and that listing information was transferred from the listing to the investigators who are conducting main interview, the various checks and transfer formats were explained.
- Team structure and roles: The investigators were explained the requirement for both the listing and interview phases of the study and also the roles and tasks assigned for each of the person.
- Informed consent: A consent form stating the purpose of the study, eligibility criteria, process of respondent selection, and confidentiality of responses, possible risks, and benefits were explained to the trainers. They were briefed on the importance of the form and process of administration.
- Briefing on the questionnaires: A complete briefing was done for each section of the listing and the main questionnaire with discussion and clarification.
After two days training in Delhi, a separate training for the listing phase and main interview phase was conducted in each of the states for the investigators and supervisors. The listing training was for two days, which included one day of field mocks. The training for the main phase was conducted for three days at the respective state, which included a day of field mock interviews as well. Researchers from SRI-IMRB and experts from IHBP were present for the state-level briefings as well.


## Interview Procedure and Ethical Considerations

All interviews were one-on-one and conducted at the respondents' homes. Informed consent was obtained from the participant before the interviewer started the interview. Privacy and confidentiality of the discussion was maintained and all possible measures were taken to ensure that no other family members were present during the interview to avoid anybody's influence (bias) on the respondents' responses. All interviews were conducted in the vernacular language and the information was coded simultaneously on the questionnaire itself. Same-sex interviewers were used for the main interviews so that women were interviewed by women investigators, and men by men.

### 2.4 DATA MANAGEMENT

Checks were in place to ensure the uniformity and accuracy of data management.

## Data Scrutiny and Coding

Before data entry every questionnaire was scrutinized. All coders and supervisors who were involved in scrutiny and coding received training from the system analyst. Open-ended questions were coded. All questionnaires were checked to ensure there was no identifying information for respondents recorded on the questionnaire.

## Data Entry

The data structure was developed by the agency and reviewed by IHBP researchers prior to start of the data entry. The data entry operation was carried out using appropriate data entry and editing software. Program-based logical checks were used to clean the data and the inconsistencies were resolved on the basis of the responses recorded in the questionnaires.

## CHAPTER 3

## CHARACTERISTICS OF SURVEY RESPONDENTS

This chapter discusses the background characteristics of selected respondents in the survey.


## CHAPTER 3

## CHARACTERISTICS OF SURVEY RESPONDENTS

This chapter covers the profile of the respondents surveyed for the reach and recall study. It provides details with reference to both male and female respondents accommodating for the geographical differentiation of rural and urban divide. The indicators discussed in this chapter relate to the sociocultural aspects of the respondents in the study states.

### 3.1 DEMOGRAPHIC PROFILE OF RESPONDENTS

The basic demographic identifiers for characterizing the respondents pertain to their age group, gender, marital status, and family composition. A snapshot of the key demographic characteristics of the respondents interviewed in the study is shown in Table 3.1 below.


Analysis of the demographic profile of the respondents shows that a higher proportion (30\%) of respondents belonged to the 30-39 years age group. There was representation from the other age bands as well. The mean age of all respondents was around 38 years ( $\mathrm{SD}=11.93$ ), with the mean age of males being around 40 years ( $\mathrm{SD}=12.05$ ) and close to 38 years for females ( $\mathrm{SD}=11.63$ ). Overall, the split between rural and urban respondents was 70:30 which was in proportion to the individual proportions within the state population. The majority ( $86 \%$ ) of the respondents were married.

Figure 3.1: SEC Split (Urban)


All Urban Respondents: 958

Figure 3.2: SEC Split (Rural)


All Rural Respondents: 2,190

The sample was representative in terms of the Socio-Economic Class (SEC) with respondents belonging to both upper and lower classes being interviewed. In urban areas, around 33\% of the survey respondents belonged to the upper SECs (SEC A and B) and $45 \%$ belonged to the lower SEC (SEC D and E). In rural areas, around 9\% of the respondents interviewed belonged to SEC R1 and $35 \%$ belonged to SEC R5.

### 3.2 ETHNICITY AND BELOW POVERTY LINE STATUS OF RESPONDENTS

Socio-cultural dimensions play an important role in shaping the attitudes and behavior of any resident population. The study captured details of caste and religion from all the respondents interviewed. Table 3.2 presents the percentage distribution by ethnicity and status of having a BPL card with them.

Table 3.2: Ethnicity and BPL Status of Survey Respondents (Percentage of Respondents)

| Characteristics | All | Assam | Maharashtra | Odisha | Uttar Pradesh | Tamil Nadu |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (All Respondents) | 3,148 | 649 | 600 | 659 | 619 | 621 |
| Religion |  |  |  |  |  |  |
| Hindu | 81.3 | 49.8 | 87.4 | 97.9 | 81.2 | 91.1 |
| Muslim | 14.4 | 49.0 | 2.2 | 1.4 | 16.7 | 1.7 |
| Christian | 1.6 | 0.8 | 0.3 | 0.6 | 0.0 | 6.2 |
| Buddhist/Neo-Buddhist | 1.8 | 0.0 | 9.4 | 0.0 | 0.0 | 0.0 |
| Caste |  |  |  |  |  |  |
| Other Backward Caste | 39.1 | 15.9 | 48.8 | 26.9 | 63.5 | 42.5 |
| Scheduled Caste | 14.0 | 4.4 | 19.4 | 16.9 | 16.4 | 13.4 |
| Scheduled Tribe | 12.1 | 9.6 | 7.1 | 32.5 | 5.7 | 4.2 |
| General Caste | 32.8 | 66.1 | 23.2 | 23.4 | 12.8 | 37.3 |
| BPL Status |  |  |  |  |  |  |
| Yes | 26.8 | 32.5 | 18.0 | 44.2 | 36.7 | 1.1 |
| No | 67.6 | 66.9 | 79.6 | 55.8 | 61.9 | 75.0 |
| Don't Know | 5.6 | 0.6 | 2.5 | 0.0 | 1.5 | 23.9 |

Close to $81 \%$ of the respondents belonged to the Hindu religion and another $15 \%$ were Muslim. In Assam, close to $50 \%$ of the population were Hindu and $50 \%$ Muslim. Data from Uttar Pradesh suggests that close to $17 \%$ of the interviewed respondents were Muslim and around $81 \%$ were Hindu. The lowest proportion of Muslims in the sample was reported in Odisha, at around 1.4\%.

Analysis of the data by caste also revealed that the majority of respondents across states belonged to the Other Backward Classes (OBC) (39\%) and General Caste (33\%). The OBC was in higher proportion in all the study states except Assam, where 66\% of the respondents were General Caste and 16\% OBC. This could also be attributed to the fact that close to $50 \%$ of the respondents in Assam were Muslim. Another observation from the data revealed that around $50 \%$ of the respondents in the state of Odisha also belonged to the Schedule Caste/Scheduled Tribe (SC/ST) category.

Overall, close to $27 \%$ of the sample interviewed had a BPL card (11\% urban, $35 \%$ rural). Looking into the variations at the state level, analysis showed that the highest proportion of BPL card holders were from Odisha ( $\sim 44 \%$ ), followed by Uttar Pradesh (~37\%).

### 3.3 OCCUPATIONAL PROFILE OF RESPONDENTS

The study also captured the employment and occupation details of the respondents interviewed (Figure 3.3).

Figure 3.3: Status of Paid Work among Survey Respondents (Percentage of Respondents)


Analysis of the data revealed that about $68 \%$ of the respondents had worked for money in the last 12 months. The proportion of such respondents was the highest in Tamil Nadu (87\%) and the lowest in Assam (55\%). Further analysis by gender revealed that $96 \%$ of males ( $n=1,531$ ) and $37 \%$ of females ( $\mathrm{n}=586$ ) had worked for money in the last 12 months.

Most of the urban males were skilled workers, shop owners, petty traders, and unskilled workers. Rural males were mainly involved in agriculture with cultivator, agricultural labor, skilled and unskilled work as their main occupations. Rural females were also mainly involved in agricultural work (~46\%).

Table 3.3: Occupational Profile of Survey Respondents

| Occupation Profile | All |  |  |  |  |  |  |  | Urban |  | Male | Female | Male | Female |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (All respondents currently <br> working for money) | 2,096 | 435 | 172 | 1,068 | 421 |  |  |  |  |  |  |  |  |  |
| Unskilled Worker | 18.1 | 13.9 | 20.1 | 17.0 | 25.6 |  |  |  |  |  |  |  |  |  |
| Skilled Worker | 17.9 | 33.9 | 22.0 | 14.3 | 6.2 |  |  |  |  |  |  |  |  |  |


| Occupation Profile | All | Urban |  | Rural |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Male | Female |
| Petty Trader | 6.9 | 13.2 | 5.4 | 6.0 | 2.3 |
| Shop Owner | 5.1 | 14.0 | 1.5 | 3.2 | 1.0 |
| Businessman/Industrialist | 1.1 | 1.6 | 1.7 | 1.2 | 0.0 |
| Self-Employed Professional | 0.4 | 1.4 | 0.2 | 0.2 | 0.0 |
| Clerical/Salesman | 2.7 | 5.7 | 0.5 | 1.9 | 2.0 |
| Supervisory Level | 1.9 | 4.0 | 2.9 | 1.4 | 0.6 |
| Officer/Exec Junior Level | 0.6 | 1.4 | 0.0 | 0.3 | 0.6 |
| Officer/Exec Mid-Senior | 0.4 | 0.2 | 1.2 | 0.5 | 0.1 |
| Teacher/Lecturer | 1.9 | 1.4 | 2.7 | 1.8 | 2.3 |
| Student | 1.3 | 1.5 | 0.2 | 1.4 | 1.4 |
| Agricultural Laborer | 15.0 | 5.9 | 3.4 | 18.8 | 20.7 |
| Cultivator | 21.2 | 1.2 | 1.3 | 31.5 | 25.7 |
| Servant | 0.7 | 0.1 | 1.4 | 0.7 | 0.8 |
| Others | 5.0 | 0.7 | 35.7 | 0.0 | 10.7 |

Analysis revealed that close to $30 \%$ of the illiterate respondents were involved in the unskilled labor, which decreased to as low as $0.5 \%$ in the case of those who were graduates and above from college.

### 3.4 EDUCATIONAL PROFILE OF THE RESPONDENTS

The educational profile of the respondents interviewed for the study is shown in Table 3.4. Overall, around $21 \%$ of respondents were illiterate, close to $9 \%$ had completed school through Class XII, and around $16 \%$ were educated through Class X.

Table 3.4: Percentage Distribution of Literacy Levels of Survey Respondents

| Education Level | All | Assam | Maharashtra | Odisha | Uttar Pradesh | Tamil Nadu |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (All Respondents) | 3,148 | 649 | 600 | 659 | 619 | 621 |
| Illiterate | 20.6 | 17.5 | 9.2 | 15.9 | 28.4 | 32.2 |
| Literate with no formal education | 6.1 | 11.5 | 1.2 | 13.1 | 1.9 | 1.8 |
| Primary school (Class V completed) | 19.6 | 26.9 | 14.7 | 23.7 | 17 | 14.8 |
| Middle school (Class VIII completed) | 18.0 | 15.3 | 15.6 | 22.1 | 20.9 | 15.9 |
| Secondary school (Class X completed) | 16.0 | 12.3 | 23.1 | 16.2 | 12.6 | 16.0 |
| Senior secondary school (Class XII completed) | 9.4 | 8.5 | 17.3 | 4.4 | 7.7 | 9.5 |
| Graduate from college and above | 7.9 | 7.3 | 7.8 | 4.5 | 10.9 | 9.2 |

Looking into the inter-state variations, the data revealed that the literacy rate among the respondents interviewed was the highest in Maharashtra (91\%) and was lowest in the state of Tamil Nadu (68\%). Similarly, Uttar Pradesh had around $11 \%$ respondents educated more than graduate level at college, which was the highest degree attend by respondents in any survey state. The lowest was in Odisha at around 5\%.

Further analysis revealed that among urban respondents, close to $88 \%$ were literate ( $n=843$ ), whereas in the rural areas the literacy level was about $75 \%$ ( $n=1643$ ). Of the male respondents, about $88 \%$ were
literate ( $n=1404$ ), whereas among female respondents, the literacy level was about $70 \%(n=1108)$. Data suggest that the literacy levels were higher among the urban population and among the male respondents.

An analysis by gender revealed that close to $57 \%$ of the males were educated as Class VIII completed in school as compared with $72 \%$ offemales. This suggested that education levels were higher among the male respondents than female respondents. Analysis of the data by age revealed that around 91\% of the younger cohort (18-27 years, $\mathrm{n}=618$ ) were educated, which dropped to around $70 \%$ among the older cohort (58-65 years, $\mathrm{n}=259$ ).

### 3.5 MEDIA EXPOSURE OF RESPONDENTS

Media exposure was measured by asking respondents about the frequency (almost every day, at least once a week, less than once a week, not at all) with which they read newspapers, magazines, watched TV, or listened to the radio. The usage of Internet was also investigated based on these parameters but only to those who had access to the Internet. A snapshot of the media habits disaggregated by gender and location is presented in Table 3.5 below.

| TV Viewership | Total |  |  | Urban |  |  | Rural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| (All respondents) | 3,148 | 1,565 | 1,583 | 958 | 465 | 493 | 2,190 | 1,100 | 1,090 |
| Listen to radio at least once a week | 13.7 | 17.7 | 9.3 | 15.8 | 18.6 | 12.5 | 12.8 | 17.3 | 7.9 |
| Watch TV at least once a week | 61.3 | 63.0 | 59.5 | 85.7 | 83.1 | 89.1 | 50.7 | 53.6 | 47.5 |
| Read newspaper at least once a week | 32.0 | 47.6 | 14.6 | 52.6 | 71.6 | 29.2 | 23.0 | 36.4 | 8.7 |
| Read magazines at least once a week | 6.5 | 8.7 | 3.9 | 13.1 | 17.0 | 8.3 | 3.5 | 4.8 | 2.2 |

The highest penetration of any regular media consumption was for TV, since $61 \%$ of respondents watched TV at least once a week, with the differentials being higher in the urban areas (86\%) and with males (63\%). Overall, reading magazines (around $7 \%$ percent) was the lowest among the various types of media exposure. A stark difference by gender was reported for reading newspapers. Close to $72 \%$ of males in the urban areas read a newspaper at least once a week, as against $29 \%$ of females in urban areas (Table 3.5).

Figure 3.4: Frequency of Internet Usage (\%)


All respondents who access Internet (167)

The data by state revealed that TV viewership was the highest in Tamil Nadu (94\%), followed by Maharashtra (84\%), and the lowest in Uttar Pradesh (34\%). In contrast to TV viewership, regular readership of newspapers was found to be the highest in Maharashtra (50\%) and the lowest in Assam (18\%).

Analysis of the media exposure by family composition also revealed that more respondents in extended families (around 69\%) watched TV at least once a week, rather than those who lived in nuclear families (around 57\%). Further, all the OBCs, close to $65 \%$ watched TV at least once a week as compared with $41 \%$ among the ST respondents.

The study looked at penetration of Internet use. The data showed that around 7\% of the total respondents had access to the Internet. As many as 43\% of respondents had never heard about the Internet and most of them belonged to rural areas.

Of all respondents who had access to the Internet ( $n=167$ ), about $80 \%$ reported that they used it at least once a week. The usage was similar when compared among the urban areas ( $80 \%$ ) and rural areas (79\%).

### 3.6 MEDIA PLAN VERSUS MEDIA HABITS

The ads that were evaluated in this study, (Four Drops campaign and the Little Girls campaign) were aired on different national and regional TV channels. The media plan stated that the reach of the ads could be maximized by penetrating not only through the national channels, but also through the regional channels.

The viewership ofTV segregated by different channels was assessed for the respondents who watched TV at least once a week. Table 3.6 presents the details of the channels watched by respondents segregated by location and gender. All of the channels mentioned in Table 3.6 were part of the NACO media plan for the VBD campaign.

| Channels | Category | Total* |  |  | Urban* |  |  | Rura** |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| N |  | 2,006 | 1,033 | 973 | 823 | 407 | 416 | 1,183 | 626 | 557 |
| STAR PLUS | National | 35.6 | 32.1 | 39.6 | 44.7 | 38.6 | 51.8 | 28.8 | 27.5 | 30.3 |
| ZEE TV | National | 28.5 | 24.9 | 32.8 | 31.0 | 25.2 | 37.7 | 26.6 | 24.6 | 29.0 |
| Zee Cinema | National | 22.6 | 29.7 | 14.2 | 24.3 | 29.3 | 18.7 | 21.2 | 29.9 | 10.8 |
| AAJTAK | National | 19.8 | 28.8 | 9.3 | 30.8 | 43.3 | 16.5 | 11.7 | 18.2 | 3.8 |
| Colors | National | 19.6 | 18.0 | 21.6 | 22.8 | 19.4 | 26.7 | 17.3 | 17.0 | 17.7 |
| SET MAX | National | 17.3 | 23.7 | 9.7 | 18.2 | 20.6 | 15.4 | 16.6 | 26.0 | 5.4 |
| ZEE NEWS | National | 16.2 | 19.9 | 11.8 | 26.4 | 31.2 | 20.9 | 8.6 | 11.8 | 4.8 |
| SONY | National | 15.4 | 18.2 | 12.2 | 22.1 | 25.1 | 18.6 | 10.5 | 13.2 | 7.3 |
| News 24 | National | 0.6 | 0.8 | 0.2 | 0.3 | 0.6 | 0.0 | 0.7 | 1.0 | 0.4 |
| ABP NEWS | National | 0.5 | 0.9 | 0.0 | 0.5 | 0.9 | 0.0 | 0.5 | 1.0 | 0.0 |
| INDIA TV | National | 0.4 | 0.6 | 0.1 | 0.5 | 1.0 | 0.0 | 0.2 | 0.3 | 0.2 |
| STAR GOLD | National | 0.3 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 1.0 | 0.0 |
| 9 XM | National | 0.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.7 | 0.0 |
| CHANNELV | National | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| CNN/IBN | National | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| MTV | National | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| NDTV 24X7 | National | 0.0 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |


| Channels | Category | Total* |  |  | Urban* |  |  | Rura** |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| TIMES NOW | National | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| News Live | Assam | 8.7 | 10.9 | 6.1 | 4.1 | 4.9 | 3.1 | 12.1 | 15.2 | 8.3 |
| Rang | Assam | 5.6 | 6.8 | 4.2 | 3.0 | 2.9 | 3.1 | 7.5 | 9.6 | 5.1 |
| DY 365 | Assam | 3.8 | 6.1 | 1.2 | 2.2 | 3.7 | 0.5 | 5.0 | 7.7 | 1.7 |
| NE TV | Assam | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.5 | 0.2 | 0.3 | 0.0 |
| NEWS TIME | Assam | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.4 | 0.0 |
| PRIME NEWS | Assam | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| RAMDHENU | Assam | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 |
| Star Pravah | Maharashtra | 1.8 | 0.7 | 3.2 | 0.9 | 0.5 | 1.3 | 2.5 | 0.8 | 4.7 |
| ZEE MARATHI | Maharashtra | 0.8 | 1.2 | 0.4 | 0.8 | 1.0 | 0.6 | 0.9 | 1.4 | 0.3 |
| ETV MARATHI | Maharashtra | 0.1 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.2 | 0.1 | 0.3 |
| ETV ORIYA | Orissa | 3.6 | 4.5 | 2.6 | 1.1 | 1.6 | 0.6 | 5.4 | 6.5 | 4.1 |
| OTV | Orissa | 3.2 | 5.1 | 0.9 | 2.4 | 4.2 | 0.4 | 3.7 | 5.7 | 1.3 |
| Tarang | Orissa | 2.2 | 1.3 | 3.3 | 0.3 | 0.4 | 0.2 | 3.7 | 1.9 | 5.7 |
| SUNTV | Tamil Nadu | 27.1 | 26.0 | 28.4 | 29.5 | 27.3 | 32.0 | 25.4 | 25.1 | 25.7 |
| KTV | Tamil Nadu | 5.9 | 8.0 | 3.4 | 6.6 | 8.5 | 4.4 | 5.4 | 7.6 | 2.7 |
| SUN NEWS | Tamil Nadu | 4.8 | 7.7 | 1.3 | 5.0 | 8.8 | 0.6 | 4.7 | 7.0 | 1.9 |
| ETVTELUGU | Tamil Nadu | 4.2 | 2.7 | 5.9 | 2.8 | 2.1 | 3.6 | 5.2 | 3.2 | 7.7 |
| SUN MUSIC | Tamil Nadu | 1.9 | 3.5 | 0.1 | 3.0 | 5.5 | 0.1 | 1.2 | 2.0 | 0.2 |
| GEMINITV | Tamil Nadu | 1.6 | 1.1 | 2.1 | 1.5 | 1.4 | 1.5 | 1.6 | 0.9 | 2.5 |
| Zee Tamizh | Tamil Nadu | 1.2 | 1.4 | 1.0 | 1.9 | 2.3 | 1.4 | 0.7 | 0.8 | 0.7 |
| RAJTV | Tamil Nadu | 1.1 | 0.8 | 1.5 | 0.7 | 0.8 | 0.7 | 1.4 | 0.8 | 2.2 |
| JAYA MAX | Tamil Nadu | 0.8 | 1.4 | 0.0 | 1.0 | 1.8 | 0.0 | 0.6 | 1.2 | 0.0 |
| TV 9 Telugu | Tamil Nadu | 0.3 | 0.5 | 0.0 | 0.4 | 0.7 | 0.0 | 0.2 | 0.4 | 0.0 |
| DABANGG | Uttar Pradesh | 0.2 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.3 | 0.3 | 0.3 |

Note: *Multiple Responses Obtained

Among the national channels, viewership was the highest for Star Plus (36\%), followed by Zee TV (29\%), Zee Cinema (23\%), and AajTak (20\%). Data also suggest that entertainment channels such as Star Plus are more popular among females (40\%) than males (32\%). News channels such as AajTak were reported as more popular among males (29\%) than females (9\%).

Among the regional channels, the most watched channel in Assam was News Live (9\%); in Maharashtra, Star Pravah (2\%), ETV Oriya (4\%) in Orissa, and Sun TV (27\%) in Tamil Nadu.

Apart from airing the VBD ads on selected channels, the NACO also featured them under time slots as specified in their media plan. Table 3.7 presents the details of the time slots and the percentage respondents who watched TV in these time slots segregated by location and gender.

Table 3.7: Percentage Distribution of Respondents who Watched TV at Time Slots as Specified by the VBD Media Plan by Location and Gender

|  | Tota** |  |  | Urban* |  |  | Rural* |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time Slots | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| N | 2,006 | 1033 | 973 | 823 | 407 | 416 | 1,183 | 626 | 557 |
| $7 \mathrm{AM}-12$ NOON | 35.1 | 46.6 | 21.5 | 44.7 | 57.9 | 29.7 | 28.0 | 38.5 | 15.4 |
| 12-5 PM | 30.7 | 23.7 | 38.9 | 36.6 | 23.7 | 51.4 | 26.4 | 23.8 | 29.5 |
| 5-8 PM | 71.8 | 65.6 | 79.2 | 69.4 | 59.3 | 80.9 | 73.6 | 70.1 | 77.8 |
| 8 PM-12 MIDNIGHT | 76.5 | 84.8 | 66.7 | 79.5 | 85.9 | 72.2 | 74.3 | 84.0 | 62.6 |

Note: *Multiple Responses

The highest viewership was in the evening and the night time slots. In between 5 and 8 p.m.; close to $72 \%$ of the respondents stated that they watched TV. In the 8 p.m. -12 midnight time slot, around $77 \%$ of the respondents mentioned that they watched TV. Further analysis revealed that early in the morning (7 a.m. -12 noon) more males (47\%) watched TV than females (22\%). It was also reported that $63 \%$ of females in the rural areas who watched TV at least once a week, watched from 8 p.m. -12 midnight.

## CHAPTER 4

## REACH AND RECALL OF NACO MASS MEDIA CAMPAIGN ON VBD

This chapter discusses on reach of the media campaigns and also recall of campaign messages


## CHAPTER 4

## REACH AND RECALL OF NACO MASS MEDIA CAMPAIGN ON VBD

One of the key objectives of the NACP III was blood safety, under which provision of safe and quality blood even to remote areas of the country was of prime importance. In a country like India, it is not possible to test all the blood collected; thus, it is advisable to avoid donations by high-risk populations. It is widely accepted that the blood collected from regular, non-remunerated voluntary donors is the safest and this should contribute the major part of blood requirement of the country.

Figure 4.1: Details of the VBD Campaign


## Measuring of Reach and Recall of Voluntary Blood Donation Campaigns

All respondents were asked if they have ever seen or heard any ad related to VBD. After seeking spontaneous reach, respondents were shown still boards from the TV ads and were asked to listen on an audio player for the radio ads. The reach of each of the four ads was checked separately. To evaluate the campaign, it is important to calculate the reach of the entire campaign and not just the individual ads. Thus, those who had seen or heard any of the four ads that were part of the campaign were considered to have been reached.

For reporting purposes the following definitions have been used:

- Overall Reach of the Campaign- Seen/heard any of the four ads
- Reach of Little Girl Campaign - Seen/heard the Little Girl TV ad OR Little Girl radio ad
- Reach of Four Drops Campaign- Seen/heard the Four Drops TV ad OR Four Drops radio ad

For each of the media spots individually, respondents' recall of the ads' two key messages were also analyzed. If they could correctly mention the key messages of the ads, a recall is affirmed at the individual media spot level. At an aggregate level for this sub-section of the report, if the respondent could recall any of the key messages for any of the ads, recall was reported. Also of note was that the reach was measured overall (all respondents) and recall was measured for those who had been previously exposed to the media spots.

### 4.1 SPONTANEOUS RECALL OF ANY VBD ADS

To check the spontaneous recall of the campaign, respondents were first asked if they could recall any ad related to VBD that they have seen or heard in the past 12 months. These questions were not aided with any ad material at this stage. They were further asked to describe the ad they could recall.

Approximately $26 \%$ of the respondents could spontaneously recall seeing or hearing any VBD ad. Spontaneous recall was higher in Maharashtra and Odisha with $36.6 \%$ and $38.7 \%$ respectively (Figure 4.2).

Figure 4.2: Spontaneous Recall for any VBD Ad
Spontaneous Recall - Any Ad (\%)


The respondents who stated positively to having seen or heard any VBD ad were also asked to describe the attributes of the ad. Based on the first description given by the respondents, about 42\% ( $\mathrm{n}=343$ ) had seen or heard the Little Girl ad and approximately $14 \%(\mathrm{n}=115$ ) referred to the Four Drops/Macchar ad.

Spontaneous recall of the Little Girl ad was higher among respondents from Maharashtra and lower in Tamil Nadu. The possible reason for the low recall in Tamil Nadu could be the lack of the local language edit for this ad in the state. The respondents were also asked to describe aspects of the ad they recalled. Around $22 \%$ of respondents who recalled the Little Girl ad, remembered the girl saying thank you and 11\% mentioned that one girl talks about donating blood (Table 4.1)

### 4.2 REACH OF THE VBD CAMPAIGN AND ITS COMPONENTS

The present sub-section of the report discusses the reach of the overall VBD campaign and its components (Little Girl and Four Drops) in detail. The discussion starts with the reach at the overall

Table 4.1: Details of Ads Spontaneously Recalled

| Ads mentioned -Spontaneous (\%) | All | Assam | Maharashtra | Odisha | Uttar Pradesh | Tamil Nadu |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $N$ (all respondents spontaneously recalling ad): | 752 | 139 | 172 | 257 | 103 | 81 |
| Little Girl Ad | 41.6 | 34.3 | 82.8 | 22.7 | 49.9 | 0.9 |
| Girl says thank you | 21.9 | 27.8 | 54.6 | 2.0 | 15.7 | 0.0 |
| One girl talks to a man about donating blood | 10.9 | 7.0 | 8.6 | 18.5 | 11.4 | 1.8 |
| Girl is unwell | 4.4 | 4.2 | 12.9 | 1.0 | 0.1 | 0.0 |
| Four Drops Ad | 13.9 | 14.1 | 29.6 | 7.4 | 6.4 | 3.6 |
| Friends discussing about going for blood donation | 7.7 | 13.9 | 10.5 | 7.8 | 1.3 | 0.4 |
| Others | 31.9 | 18.9 | 5.8 | 38 | 30.5 | 91.5 |

campaign level and then drills down to the individual component. The discussion at the component level caters to both the ads across both TV and radio channels.

### 4.2.1 Reach of the VBD Campaign

Reach of the media campaign was measured by individual component. The reach measured was based on affirmative responses to questions that gauged whether the respondent had seen or heard the respective media spot in the past 12 months from the date of interview. It was then combined to assess reach for the VBD campaign in the aggregate.

The reach as measured in the study was based on spontaneous recall of an ad and through stimulus being shown as storyboards for TV ads or asking the respondent to listen to the radio ads on media player. Whether the respondent had previously seen/heard the ad was used in the analysis framework as a measure of reach. This was done to cut through the clutter of information that the respondent might be getting from other sources. It also ensured that the reach and recall measured was for the intended VBD campaign. Figure 4.3 presents the reach of the VBD campaign overall and componentwise in all the study states.

Figure 4.3: Reach of the Overall VBD Campaign and its Components (Percentage)


Overall, close to $32 \%$ of the respondents had seen or heard of any one of the blood donation ads. Further analysis at the state level revealed that the reach of the campaign was highest in Maharashtra (41\%), followed by Uttar Pradesh (39\%). Tamil Nadu reported to have the lowest reach of the campaign, with close to $14 \%$ of the sample respondents aware of any of the four components of the VBD campaign.

At the component level, the overall reach of the Little Girl ad (28\%) was almost double that of the Four Drops ad (14\%). The state-level differences revealed that Maharashtra (38\%) and Uttar Pradesh (37\%) had the highest reach of the Little Girl ad. The reach of Four Drops ad was highest in Maharashtra (17\%) and almost similar in Assam, with the lowest in Tamil Nadu (11\%). In all the states, the reach of Little Girl ad was higher than the Four Drops ad, except in Tamil Nadu, which reported a reach of 5\% for the former and near about 11\% for the latter.

Table 4.2: Reach of the VBD Campaign by Key Demographic Characteristics

| Reach (\%) | N (All) | VBD Campaign | Little Girl Ad | Four Drops Ad |
| :---: | :---: | :---: | :---: | :---: |
| AGE GROUP (\%) |  |  |  |  |
| 18-30 years | 962 | 35.0 | 28.7 | 17.5 |
| 31-50 years | 1,664 | 32.1 | 28.6 | 12.7 |
| 50+ years | 518 | 27.3 | 24.2 | 13.2 |
| GENDER AND LOCATION (\%) |  |  |  |  |
| Urban Males | 465 | 45.2 | 35.3 | 23.8 |
| Urban Females | 493 | 37.3 | 36.6 | 15.7 |
| Rural Males | 1,100 | 35.5 | 31.4 | 15.5 |
| Rural Females | 1,090 | 20.0 | 16.9 | 7.3 |
| Worked in last 12 months (\%) |  |  |  |  |
| Yes | 2,096 | 32.6 | 27.9 | 14.2 |
| No | 1,052 | 31.1 | 27.9 | 14.0 |
| BPL Status (\%) |  |  |  |  |
| BPL | 812 | 30.2 | 27.3 | 13.7 |
| Non-BPL | 2,186 | 35.3 | 30.2 | 15.3 |

It was found that the reach of the overall VBD campaign was higher among the males (39\%) than females $(25 \%)$. Looking into the differential of location revealed that the reach of the campaign was higher in urban areas (42\%) than in the rural areas (28\%).

Figure 4.4: Reach of the VBD Campaign and its Components by Education Level (Percentage)


The reach of the campaign greater among the youngest cohort (18-30 years) at $35 \%$, with a little less at $32 \%$ among those aged $31-50$ years. A similar trend was observed when the data were analyzed for the other components of the campaign. The reach of the Little Girl ad among the 18-30 years age group was around $29 \%$, which dropped to around $27 \%$ among those aged 50 and above. Similarly,
the differential of the reach among the youngest and oldest cohorts for the Four Drops ad was around $4 \%$ and skewed toward the younger cohort.

When the data were analyzed by respondent education level, the overall reach of the VBD campaign increased from $11 \%$ among those who were illiterate to around $72 \%$ among graduates. Similar analyses for the Little Girl ad revealed that the reach was around 9\% among those who were illiterate and that reach increased to $62 \%$ among those educated graduates and above. Similar differentials were observed for the four drops ad where almost 45\% graduates or above were exposed, compared to 3\% illiterates. (Figure 4.4).

A summary of the reach of the VBD campaign is presented in the table 4.3 and 4.4.
Table 4.3: Reach of the VBD Campaign—Summary by Location and Gender

|  | Total |  |  | Urban |  |  | Rural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| N | 3,148 | 1,565 | 1,583 | 958 | 465 | 493 | 2,190 | 1,100 | 1,090 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-27 years | 6.5 | 7.1 | 5.7 | 6.5 | 7.0 | 5.9 | 6.4 | 7.2 | 5.7 |
| 28-37 years | 10.1 | 11.0 | 9.1 | 14.2 | 15.0 | 13.1 | 8.4 | 9.2 | 7.5 |
| 38-47 years | 8.8 | 11.0 | 6.3 | 12.5 | 13.6 | 11.0 | 7.2 | 9.8 | 4.3 |
| 48-57 years | 4.6 | 6.3 | 2.7 | 6.4 | 7.6 | 4.9 | 3.8 | 5.7 | 1.8 |
| 58-65 years | 2.2 | 3.1 | 1.2 | 2.1 | 1.9 | 2.4 | 2.2 | 3.6 | 0.7 |
| Education Level |  |  |  |  |  |  |  |  |  |
| Illiterate | 2.3 | 1.3 | 3.5 | 1.3 | 0.9 | 1.7 | 2.8 | 1.4 | 4.2 |
| Literate with no formal education | 0.7 | 0.8 | 0.6 | 0.3 | 0.1 | 0.6 | 0.9 | 1.2 | 0.6 |
| Primary (Class V completed) | 4.5 | 5.8 | 3.0 | 1.9 | 2.8 | 0.8 | 5.6 | 7.1 | 3.9 |
| Middle (Class VIII completed) | 5.6 | 7.3 | 3.7 | 7.3 | 8.6 | 5.7 | 4.9 | 6.7 | 2.9 |
| Secondary (Class X completed) | 7.3 | 9.2 | 5.3 | 9.1 | 9.0 | 9.2 | 6.6 | 9.3 | 3.7 |
| Senior secondary (Class XIIcmpleted) | 5.3 | 6.5 | 4.0 | 9.1 | 11.4 | 6.3 | 3.6 | 4.2 | 3.1 |
| Graduate from college and above | 5.7 | 6.8 | 4.4 | 10.5 | 9.8 | 11.4 | 3.5 | 5.4 | 1.5 |
| Religion |  |  |  |  |  |  |  |  |  |
| Hindu | 26.5 | 31.7 | 20.7 | 30.6 | 28.6 | 33.1 | 24.7 | 33.1 | 15.7 |
| Muslim | 3.9 | 4.1 | 3.7 | 5.9 | 8.8 | 2.2 | 3.1 | 1.9 | 4.2 |
| Christian | 0.4 | 0.8 | 0.0 | 0.8 | 1.5 | 0.0 | 0.2 | 0.5 | 0.0 |
| Others | 30.8 | 36.6 | 24.4 | 37.3 | 38.9 | 35.3 | 28.0 | 35.5 | 19.9 |
| Caste |  |  |  |  |  |  |  |  |  |
| Other Backward Caste | 14.0 | 18.9 | 8.5 | 18.8 | 26.1 | 9.9 | 11.9 | 15.6 | 7.9 |
| Scheduled Caste | 4.1 | 4.8 | 3.3 | 7.7 | 7.7 | 7.8 | 2.5 | 3.5 | 1.5 |
| Scheduled Tribe | 3.0 | 4.7 | 1.1 | 0.8 | 0.9 | 0.6 | 3.9 | 6.4 | 1.3 |
| General Caste | 11.0 | 10.0 | 12.0 | 14.3 | 10.5 | 18.9 | 9.5 | 9.8 | 9.2 |
| Family Composition |  |  |  |  |  |  |  |  |  |
| Nuclear | 17.4 | 19.1 | 15.6 | 20.0 | 21.0 | 18.7 | 16.3 | 18.2 | 14.3 |
| Extended | 2.2 | 3.7 | 0.6 | 2.1 | 3.2 | 0.8 | 2.3 | 3.9 | 0.5 |
| Joint | 12.5 | 15.8 | 8.8 | 19.5 | 20.9 | 17.8 | 9.4 | 13.4 | 5.1 |
| Occupation |  |  |  |  |  |  |  |  |  |
| Yes | 22.2 | 36.2 | 6.6 | 27.1 | 41.3 | 9.5 | 20.0 | 33.8 | 5.4 |
| No | 10.0 | 2.4 | 18.4 | 14.6 | 3.9 | 27.8 | 7.9 | 1.7 | 14.6 |
| Have BPL Card |  |  |  |  |  |  |  |  |  |
| Yes | 8.1 | 9.6 | 6.5 | 5.8 | 3.0 | 9.3 | 9.1 | 12.6 | 5.3 |
| No | 23.8 | 29.0 | 18.1 | 35.5 | 42.2 | 27.3 | 18.7 | 22.8 | 14.5 |
| Total | 32.2 | 38.6 | 25.0 | 41.7 | 45.2 | 37.3 | 28.0 | 35.5 | 20.0 |

Table 4.4 : Reach of the VBD Campaign—Summary by States

|  |  | State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| N | 3,148 | 649 | 600 | 659 | 621 | 619 |
| Age |  |  |  |  |  |  |
| 18-27 years | 6.5 | 6.4 | 5.8 | 6.7 | 2.8 | 10.6 |
| 28-37 years | 10.1 | 8.9 | 14.5 | 12.2 | 3.5 | 11.6 |
| 38-47 years | 8.8 | 10.5 | 14.4 | 6.7 | 2.6 | 9.9 |
| 48-57 years | 4.6 | 6.4 | 5.2 | 3.7 | 3.8 | 3.8 |
| 58-65 years | 2.2 | 3.6 | 1.4 | 1.8 | 0.8 | 3.1 |
| Education Level |  |  |  |  |  |  |
| Illiterate | 2.3 | 1.9 | 2.4 | 0.7 | 0.1 | 6.5 |
| Literate with no formal education | 0.7 | 2.0 | 0.1 | 1.2 | 0.0 | 0.2 |
| Primary (Class V completed) | 4.5 | 8.3 | 3.4 | 5.2 | 0.9 | 4.3 |
| Middle (Class VIII completed) | 5.6 | 5.5 | 5.3 | 7.8 | 3.2 | 6.0 |
| Secondary (Class X completed) | 7.3 | 7.8 | 9.1 | 9.7 | 2.5 | 7.5 |
| Senior secondary (Class XII completed) | 5.3 | 4.6 | 11.3 | 3.0 | 2.4 | 5.6 |
| Graduate from college and above | 5.7 | 5.9 | 6.3 | 3.5 | 4.2 | 8.4 |
| Religion |  |  |  |  |  |  |
| Hindu | 26.5 | 26.5 | 34.1 | 30.0 | 11.5 | 30.4 |
| Muslim | 3.9 | 9.4 | 1.4 | 0.8 | 0.6 | 7.2 |
| Christian | 0.4 | 0.1 | 0.3 | 0.3 | 1.4 | 0.0 |
| Others | 1.4 | 0.0 | 5.5 | 0.1 | 0.0 | 1.4 |
| Caste |  |  |  |  |  |  |
| Other Backward Caste | 14.0 | 9.6 | 18.5 | 7.0 | 8.8 | 26.9 |
| Scheduled Caste | 4.1 | 1.8 | 9.3 | 4.7 | 1.5 | 3.5 |
| Scheduled Tribe | 3.0 | 3.7 | 0.4 | 9.3 | 0.2 | 0.8 |
| General Caste | 11.0 | 20.7 | 12.9 | 10.2 | 3.0 | 7.8 |
| Family Composition |  |  |  |  |  |  |
| Nuclear | 17.4 | 26.8 | 9.8 | 18.6 | 10.1 | 21.2 |
| Extended | 2.2 | 3.6 | 0.2 | 4.6 | 2.5 | 0.0 |
| Joint | 12.5 | 5.6 | 31.3 | 8.0 | 1.0 | 17.8 |
| Occupation |  |  |  |  |  |  |
| Yes | 22.2 | 20.9 | 24.9 | 25.8 | 12.3 | 27.0 |
| No | 10.0 | 15.1 | 16.5 | 5.3 | 1.2 | 12.0 |
| Have BPL Card |  |  |  |  |  |  |
| Yes | 8.1 | 10.9 | 4.6 | 10.9 | 0.3 | 13.3 |
| No | 23.8 | 25.0 | 36.1 | 20.2 | 12.9 | 25.6 |
| Total | 32.2 | 36.0 | 41.3 | 31.1 | 13.5 | 39.0 |

### 4.2.2 Multivariate Analysis to look into the Predictors of Reach of VBD Campaign

One thrust of the study was to identify the major predictor variables of the reach and recall of the media components among the target population. The predictor variables were mainly to be gauged from the demographic information that the study captured.

To identify the relationship and to establish a model of prediction for reach and recall, logistic regression models were built based on certain demographic variables as predictors and taking the reach and recall separately as independent variables in two subsequent models. In the subsequent sections, details of both the models and key outputs have been presented.

The details of the model are below (the dependent variable is reach and the construct mentioned in the table are independent variables) (Table 4.5)

Table 4.5: Logistic Regression Model for Reach of VBD Campaign

| Variable Constructs | Codes |
| :---: | :---: |
| Age | 18-24 years |
|  | 25-29 years |
|  | 30-34 years |
|  | 35-39 years |
|  | 40-49 years |
|  | 50 years and above |
| Education | Illiterate/no formal education |
|  | Primary education |
|  | Middle school |
|  | Secondary/senior-secondary school |
|  | Graduates and above |
| Family | Nuclear |
|  | Extended |
|  | Joint |
| Marriage | Single unmarried |
|  | Currently married |
|  | Divorced/separated/widowed |
| BPL | APL |
|  | BPL |
| Gender | Male |
|  | Female |
| Work | Did no work in past 12 months |
|  | Worked in past 12 months |
| Location | Rural |
|  | Urban |

The results of the model are shown in the table as under.

| Table 4.6: Results from Logistic Regression Model for Reach of VBD Campaign |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Odds Ratio |  | Odds Ratio |
| Location++ |  | Marital Status++ |  |
| Rural (RC) |  | Single unmarried (RC) |  |
| Urban | 1.284* | Currently married | . 783 |
| Family++ |  | Divorced/separated/widowed | .358* |
| Nuclear (RC) |  | Work Status++ |  |
| Extended | . 965 | Did no work in past 12 months (RC) |  |
| Joint | 1.201* | Worked in past 12 months\# | .479* |
| Age of Respondent++ |  | Education of the Respondent++ |  |
| 18-24 years** |  | Illiterate/no formal education (RC) |  |
|  |  | Primary education | 1.829* |
| 25-29 years 1.274 |  | Middle school | 2.640* |
| 30-34 years ${ }^{\text {2 }}$ 2.079* |  | Secondary/senior-secondary school | 5.544* |
| $35-39$ years 1.310 |  | Graduates and above | 15.104* |
| 40-49 years 1.588* |  | BPL category++ |  |
| 50 years and above | 1.362 | APL (RC) |  |
| Gender++ |  | BPL | 1.175 |
| Male (RC) |  |  |  |
| Female | .461* |  |  |

Results show that location was a significant predictor for campaign reach. Those living in urban areas had higher odds (1.28) of being reached by the VBD campaign than those living in rural areas. Looking into the age of the respondent, it was found that those older than 24 years were more likely to have been reached by the VBD campaign than those younger than 24 . The maximum reach was among those aged 30-34 years. This cohort was more likely to have been reached than those aged 18-24 years. Education was also a significant predictor of campaign reach. Those who had educational attainment through middle school were more likely to have seen any of the VBD ads than those respondents who were illiterate. Similarly, those educated through secondary/senior-secondary school were more likely to have seen any of the ads of the VBD campaign than respondents who were illiterate. (Table 4.6).

### 4.2.3 Recall of Key Messages of VBD Campaign

One of the foremost objectives of the study was to assess how many of the respondents interviewed could recall the key messages or taglines of VBD ads disseminated through the different media channels.

In the media spots that were assessed, the key messages that were disseminated were:

1. By donating blood, somebody's life can be saved
2. People should start donating blood from 18 years of age
3. A person can donate blood once every three months
4. Blood donation should be done only in licensed blood banks/camps
5. Blood donation does not lead to weakness

The taglines that also were used in the VBD campaign were:

## 1. Raktdaan Karke Dekho, Accha Lagta Hai

2. Karke Dekho, Accha Lagta Hai

The recall for each media spot was calculated based on the recall of any of the key messages contained within it or the taglines, as mentioned above. The overall campaign recall was measured by respondents' recall of the key messages or the taglines across all the media spots.

As shown in Table 4.7 below, the overall recall of the media campaign among all those who were exposed to any one component of the campaign ( $\mathrm{N}=939$ ) was close to $91 \%$, meaning 9 out of 10 people could recall any of the key messages of any component of the media campaign. The recall was higher among the males ( $94 \%$ ) than females ( $87 \%$ ).

When analyzed at the individual media spot level, the recall of messages from the Little Girl radio ad was the highest ( $96 \%$ ). In general, it was also seen that the recall of messages from the Little Girl ads on TV/radio were higher than recall from the Four Drops campaign (Table 4.7).

| Recall of any of the key messages from the media spots |  | Total* |  |  | Urban* |  |  | Rura** |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Little Girl-TV | \% | 88.7 | 92.2 | 83.7 | 91.7 | 97.7 | 85.2 | 86.2 | 88.4 | 82.0 |
|  | N | 610 | 331 | 279 | 245 | 111 | 134 | 365 | 220 | 145 |
| Little Girl—Radio | \% | 95.8 | 96.7 | 94.0 | 98.5 | 100.0 | 96.8 | 94.7 | 95.7 | 92.5 |
|  | N | 367 | 214 | 153 | 95 | 40 | 55 | 272 | 174 | 98 |
| Four Drops-TV | \% | 87.5 | 87.1 | 88.3 | 93.3 | 94.1 | 91.5 | 82.7 | 81.4 | 85.8 |
|  | N | 292 | 178 | 114 | 120 | 73 | 47 | 172 | 105 | 67 |
| Four Drops—Radio | \% | 86.1 | 86.7 | 85.2 | 96.1 | 98.1 | 94.2 | 80.7 | 82.2 | 77.1 |
|  | N | 159 | 87 | 72 | 57 | 27 | 30 | 102 | 60 | 42 |
| Overall Recall | \% | 91.3 | 93.9 | 87.0 | 94.9 | 97.8 | 90.5 | 89.0 | 91.5 | 84.3 |
|  | N | 939 | 549 | 390 | 331 | 174 | 157 | 608 | 375 | 233 |

Note: *All percentages are based on respondents exposed to the particular media spot

Analysis of the data by rural and urban locations revealed the fact that in the aggregate recall of key messages among those exposed to the campaign were higher in urban areas (95\%) than in rural areas ( $89 \%$ ). Analysis by gender explained that close to $94 \%$ of males and around $87 \%$ of females exposed to the campaign could recall any of the key messages.

For the Four Drops ad on TV, close to $88 \%(n=100)$ of the female respondents and nearly $87 \%(n=155)$ of the male respondents were able to recall any of the key messages. This was only media ad where more individual females than males were able to recall the key message.

The number of ads seen had a positive impact on key message. All respondents who were exposed ( $n=939$ ) were further categorized if they have seen any one ad ( $n=586$ ), two ads ( $n=248$ ), three ads ( $n=56$ ), and all four ads ( $n=49$ ). Close to $87 \%$ of the respondents who were exposed to any one of the media spots could also recall any of the key messages of the media campaign. This was higher (97\%) for those who saw any two ads and was universally reported by those who had seen three or four media spots (Figure 4.5).

Figure 4.5: Percentage of Respondents who Recalled any Key Message of the Campaign by Number of Ads Seen


Further analysis to understand the relationship between the other demographic covariates and the recall of the key message of the campaign was also done. The details are presented in Table 4.8 below.

|  | Total |  |  | Urban |  |  | Rural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| N | 939 | 549 | 390 | 331 | 174 | 157 | 608 | 375 | 233 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-27 years | 17.7 | 17.0 | 19.0 | 14.5 | 14.7 | 14.2 | 19.8 | 18.3 | 22.7 |
| 28-37 years | 28.3 | 26.2 | 31.8 | 32.1 | 32.4 | 31.8 | 25.8 | 22.6 | 31.8 |
| 38-47 years | 25.8 | 27.3 | 23.1 | 28.6 | 29.6 | 27.0 | 23.9 | 25.9 | 20.1 |
| 48-57 years | 13.0 | 15.6 | 8.6 | 14.5 | 16.8 | 11.1 | 12.0 | 14.8 | 6.7 |
| 58-65 years | 6.4 | 7.6 | 4.4 | 5.1 | 4.3 | 6.4 | 7.3 | 9.6 | 2.9 |



Table 4.9: Recall of the VBD Campaign by States

|  | State |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| N | 939 | 242 | 193 | 212 | 75 | 217 |
| Age |  |  |  |  |  |  |
| 18-27 years | 17.7 | 15.2 | 14.0 | 17.7 | 15.4 | 25.0 |
| 28-37 years | 28.3 | 20.6 | 33.8 | 35.2 | 20.2 | 27.1 |
| 38-47 years | 25.8 | 26.2 | 34.8 | 19.5 | 17.4 | 24.3 |
| 48-57 years | 13.0 | 14.7 | 12.6 | 10.7 | 24.2 | 9.7 |
| 58-65 years | 6.4 | 9.7 | 3.5 | 5.2 | 6.0 | 7.5 |
| Education Level |  |  |  |  |  |  |
| Illiterate | 5.9 | 2.4 | 5.6 | 2.2 | 0.9 | 14.5 |
| Literate with no formal education | 1.4 | 3.4 | 0.3 | 2.0 | 0.0 | 0.5 |
| Primary (Class V completed) | 11.8 | 17.5 | 8.1 | 14.5 | 5.1 | 10.2 |
| Middle (Class VIII completed) | 15.9 | 13.7 | 12.8 | 21.4 | 23.2 | 14.1 |
| Secondary (Class X completed) | 21.5 | 20.5 | 21.9 | 29.6 | 13.2 | 18.2 |
| Senior secondary (Class XII completed) | 15.0 | 12.8 | 26.4 | 7.7 | 9.0 | 13.8 |
| Graduate from college and above | 17.3 | 16.5 | 15.2 | 10.9 | 30.2 | 21.4 |


|  | State |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| Religion |  |  |  |  |  |  |
| Hindu | 76.1 | 67.8 | 81.3 | 84.5 | 72.4 | 72.9 |
| Muslim | 10.1 | 18.6 | 3.4 | 2.6 | 3.7 | 17.3 |
| Christian | 1.0 | 0.3 | 0.8 | 0.8 | 7.0 | 0.0 |
| Others | 4.1 | 0.1 | 13.3 | 0.3 | 0.0 | 3.4 |
| Caste |  |  |  |  |  |  |
| Other Backward Caste | 41.1 | 26.6 | 43.7 | 21.8 | 55.5 | 64.0 |
| Scheduled Caste | 11.6 | 5.0 | 22.6 | 10.3 | 10.4 | 8.0 |
| Scheduled Tribe | 8.4 | 8.2 | 0.8 | 28.3 | 0.6 | 2.0 |
| General Caste | 30.0 | 46.6 | 31.0 | 27.8 | 16.7 | 19.5 |
| Exposure to Media |  |  |  |  |  |  |
| Radio | 38.7 | 37.2 | 35.3 | 41.6 | 32.3 | 43.5 |
| TV | 79.9 | 82.1 | 97.8 | 77.5 | 80.7 | 60.9 |
| Both | 32.8 | 33.1 | 35.3 | 31.5 | 30.2 | 32.0 |
| Total | 91.3 | 86.8 | 98.7 | 88.3 | 83.2 | 93.6 |

Analysis of the state data revealed that the recall of the VBD campaign was the highest in Maharashtra, with close to $99 \%$ ( $\mathrm{n}=191$ ) of the exposed respondents able to recall any of the key message or tagline of the VBD campaign. The lowest was reported in Tamil Nadu with close to $83 \%(n=62)$ of the respondents recalling the message from VBD campaign (Table 4.8).

Gender-wise analysis revealed that the gap between recall percentage among graduates or above and illiterates was higher for males than it was for females. Although $17 \%$ of both graduate males and graduate females recalled the VBD campaign, it was reduced to a mere $3 \%$ among illiterate males and about $11 \%$ in illiterate females.

Analysis of the data was also done by media habit-by those, who were regular TV watchers or radio listeners. Of all those exposed to the campaign, close to $80 \%$ of regular TV viewers could recall the VBD campaign as compared with $39 \%$ of those who listen to radio. Thus, a considerably higher recall was observed among TV viewers than among radio listeners.

### 4.2.4 Multivariate Analysis to look into Predictors of Recall of VBD Campaign

The details of the model are provided below (the dependent variable is recall and the construct mentioned in the table are independent variables):

## Table 4.10: Logistic Regression Model for Recall of VBD Campaign

| Variable Constructs | Codes |
| :---: | :---: |
| Age | 18-24 years |
|  | 25-29 years |
|  | 30-34 years |
|  | 35-39 years |
|  | 40-49 years |
|  | 50 years and above |
| Education | Illiterate/no formal education |
|  | Primary education |
|  | Middle school |
|  | Secondary/senior-secondary school |
|  | Graduates and above |
| Family | Nuclear |
|  | Extended |
|  | Joint |


| Variable <br> Constructs |  |
| :--- | :--- |
| Marriage | Single unmarried |
|  | Currently married |
|  | Divorced/separated/widowed |
| GPL | APL |
|  | BPL |
|  | Male |
|  | Female |
| Location | Did no work in past 12 months |
|  | Worked in past 12 months |

The results of the model are shown in the table below.

|  | Total |
| :---: | :---: |
| Location++ |  |
| Rural (RC) |  |
| Urban | 1.349* |
| Family++ |  |
| Nuclear (RC) |  |
| Extended | . 916 |
| Joint | 1.260* |
| Age of respondent++ |  |
| 18-24 years (RC) |  |
| 25-29 years | 1.521* |
| 30-34 years | 2.275* |
| 35-39 years | 1.545* |
| 40-49 years | 1.923* |
| 50 years and above | 1.621* |
| Gender++ |  |
| Male (RC) |  |
| Female | .428* |
| Marital Status++ |  |
| Single unmarried (RC) |  |
| Currently married | . 741 |
| Divorced/separated/widowed | .368* |
| Work Status++ |  |
| Did no work in past 12 months (RC) |  |
| Worked in past 12 months\# | .480* |
| Education of the respondent++ |  |
| Illiterate/no formal education (RC) |  |
| Primary education | 1.867* |
| Middle school | 2.933* |
| Secondary/senior-secondary school | 5.955* |
| Graduates and above | 17.655* |
| BPL category++ |  |
| APL (RC) |  |
| BPL | 1.171 |

Note: ++: Predictor Variables (RC): Reference Category *: Significant at 95\% Confidence Interval

Results show that location was a significant predictor for recall. Those living in the urban areas were 1.35 times more likely to recall any message of the VBD campaign than those living in the rural areas. Looking at age, respondents greater than 24 years old were more likely to have recalled the VBD campaign than those younger than 24. The maximum recall was reported among those aged 3034 years. These respondents were 2.28 times more likely to have recalled key messages than those aged 18-24 years. Education was also a significant predictor of recall. Those who received education till middle school were 2.93 times more likely to recall any of the VBD messages than those who were illiterate. Similarly, those graduates or above were 17.67 times more likely to recall any of the messages of the VBD campaign than those who were illiterate. (Table 4.11)

### 4.3 LITTLE GIRLTV AD



The reach and recall of the Little Girl ad was assessed in the study and the following findings were observed:

### 4.3.1 Reach of Little Girl TV Ad

Analysis of the data (Table 4.12) overall revealed that the close to $21 \%$ of the respondents had seen the Little Girl ad on VBD on TV. Further analysis of the data by gender suggested that the reach of the Little Girl campaign was higher among the males (23\%) than females (18\%). In the aggregate, more urban respondents (32\%) had seen this particular TV ad than rural respondents (16\%). Among the females, those in the rural areas, around $12 \%$ had seen the ad as against $34 \%$ in the urban areas.

Analysis of the state data revealed that the reach was the highest in Maharashtra (37\%) and Assam (27\%) and the lowest in Tamil Nadu (3\%) (Table 4.13).

Analysis by age group suggested that the reach of this ad on VBD was the highest among the 28-37 age group (7\%). The data also revealed that among the 18-27 age group, more from the urban areas (11\%) had seen the ad than from the rural areas (5\%) (Table 4.13).

Table 4.12: Reach of the Little Girl TV Ad by Location and Gender

|  | Total |  |  | Urban |  |  | Rural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| N | 3,148 | 1,658 | 1,490 | 958 | 528 | 430 | 2,190 | 1,130 | 1,060 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-27 years | 3.9 | 4.2 | 3.7 | 4.6 | 3.6 | 5.8 | 3.7 | 4.4 | 2.9 |
| 28-37 years | 6.9 | 6.8 | 7.0 | 10.9 | 10.0 | 11.9 | 5.1 | 5.2 | 5.0 |
| 38-47 years | 6.0 | 7.2 | 4.6 | 10.2 | 10.3 | 10.1 | 4.1 | 5.8 | 2.4 |
| 48-57 years | 3.1 | 3.8 | 2.3 | 4.7 | 4.5 | 4.8 | 2.4 | 3.5 | 1.2 |
| 58-65 years | 1.1 | 1.4 | 0.8 | 1.4 | 1.5 | 1.4 | 0.9 | 1.3 | 0.5 |


|  | Total |  |  | Urban |  |  | Rural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| Education Level |  |  |  |  |  |  |  |  |  |
| Illiterate | 1.0 | 0.2 | 1.9 | 0.7 | 0.1 | 1.5 | 1.2 | 0.3 | 2.1 |
| Literate with no formal education | 0.5 | 0.5 | 0.4 | 0.3 | 0.1 | 0.6 | 0.6 | 0.7 | 0.4 |
| Primary <br> (Class V completed) | 2.7 | 3.4 | 1.9 | 1.5 | 2.1 | 0.8 | 3.2 | 4.0 | 2.3 |
| Middle (Class VIII completed) | 2.6 | 2.6 | 2.5 | 3.6 | 2.6 | 4.9 | 2.1 | 2.6 | 1.6 |
| Secondary (Class X completed) | 4.8 | 5.8 | 3.8 | 7.2 | 6.2 | 8.4 | 3.8 | 5.6 | 1.9 |
| Senior secondary (Class XII completed) | 4.4 | 5.4 | 3.4 | 8.5 | 10.5 | 6.0 | 2.7 | 3.0 | 2.3 |
| Graduate from college and above | 4.4 | 4.8 | 4.0 | 8.6 | 7.0 | 10.5 | 2.6 | 3.8 | 1.3 |
| Religion |  |  |  |  |  |  |  |  |  |
| Hindu | 17.4 | 19.1 | 15.6 | 24.2 | 19.1 | 30.5 | 14.5 | 19.0 | 9.6 |
| Muslim | 2.3 | 2.4 | 2.2 | 3.8 | 5.1 | 2.1 | 1.7 | 1.1 | 2.3 |
| Christian | 0.2 | 0.4 | 0.0 | 0.5 | 0.8 | 0.0 | 0.1 | 0.2 | 0.0 |
| Others | 1.1 | 1.5 | 0.4 | 3.3 | 4.9 | 1.6 | 0.0 | 0.0 | 0.0 |
| Caste |  |  |  |  |  |  |  |  |  |
| Other Backward Caste | 8.3 | 10.7 | 5.7 | 12.9 | 16.3 | 8.8 | 6.3 | 8.1 | 4.4 |
| Scheduled Caste | 2.7 | 2.6 | 2.8 | 6.1 | 5.1 | 7.4 | 1.2 | 1.5 | 0.9 |
| Scheduled Tribe | 1.7 | 2.8 | 0.5 | 0.5 | 0.9 | 0.0 | 2.2 | 3.7 | 0.7 |
| General Caste | 8.2 | 7.1 | 9.4 | 12.2 | 7.7 | 17.8 | 6.4 | 6.9 | 5.9 |
| Family Composition |  |  |  |  |  |  |  |  |  |
| Nuclear | 10.4 | 10.3 | 10.5 | 14.1 | 12.0 | 16.6 | 8.8 | 9.5 | 8.1 |
| Extended | 1.2 | 1.8 | 0.5 | 1.0 | 1.3 | 0.5 | 1.3 | 2.1 | 0.5 |
| Joint | 9.4 | 11.2 | 7.3 | 16.8 | 16.6 | 17.0 | 6.1 | 8.7 | 3.4 |
| Occupation |  |  |  |  |  |  |  |  |  |
| Yes | 14.0 | 21.7 | 5.3 | 19.0 | 27.5 | 8.5 | 11.8 | 19.0 | 4.0 |
| No | 7.0 | 1.7 | 13.0 | 12.8 | 2.5 | 25.6 | 4.5 | 1.3 | 7.9 |
| Have BPL Card |  |  |  |  |  |  |  |  |  |
| Yes | 4.7 | 4.8 | 4.7 | 5.0 | 2.4 | 8.3 | 4.6 | 5.9 | 3.3 |
| No | 16.1 | 18.6 | 13.4 | 26.7 | 27.6 | 25.5 | 11.5 | 14.3 | 8.5 |
| Total | 21.0 | 23.4 | 18.3 | 31.8 | 30.0 | 34.1 | 16.2 | 20.3 | 11.9 |

## Table 4.13: Reach of the Little Girl TV Ad by State

|  | Total | State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| N | 3,148 | 649 | 600 | 659 | 621 | 619 |
| Age |  |  |  |  |  |  |
| 18-27 years | 3.9 | 4.5 | 4.4 | 4.4 | 0.1 | 6.3 |
| 28-37 years | 6.9 | 8.0 | 13.6 | 6.8 | 1.0 | 5.2 |
| 38-47 years | 6.0 | 7.7 | 12.6 | 4.7 | 1.0 | 4.2 |
| 48-57 years | 3.1 | 4.6 | 4.8 | 3.0 | 1.0 | 2.0 |
| 58-65 years | 1.1 | 2.4 | 1.4 | 1.0 | 0.0 | 0.6 |


|  | Total |  |  | State |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| Education Level |  |  |  |  |  |  |
| Illiterate | 1.0 | 1.4 | 2.4 | 0.5 | 0.0 | 1.0 |
| Literate with no formal education | 0.5 | 1.5 | 0.0 | 0.8 | 0.0 | 0.0 |
| Primary (Class V completed) | 2.7 | 5.8 | 3.1 | 3.4 | 0.2 | 0.6 |
| Middle (Class VIII completed) | 2.6 | 3.0 | 4.3 | 4.0 | 0.3 | 1.2 |
| Secondary (Class X completed) | 4.8 | 5.5 | 8.3 | 6.2 | 0.2 | 4.1 |
| Senior secondary (Class XII completed) | 4.4 | 4.5 | 11.1 | 1.6 | 1.3 | 4.2 |
| Graduate from College and above | 4.9 | 5.5 | 7.8 | 3.3 | 1.1 | 7.1 |
| Religion |  |  |  |  |  |  |
| Hindu | 17.4 | 20.9 | 30.9 | 19.0 | 2.8 | 13.7 |
| Muslim | 2.3 | 6.3 | 1.2 | 0.5 | 0.0 | 3.5 |
| Christian | 0.2 | 0.1 | 0.3 | 0.3 | 0.3 | 0.0 |
| Others | 1.1 | 0.0 | 4.4 | 0.0 | 0.0 | 1.0 |
| Caste |  |  |  |  |  |  |
| Other Backward Caste | 8.3 | 7.6 | 17.4 | 4.6 | 1.6 | 11.1 |
| Scheduled Caste | 2.7 | 1.3 | 8.2 | 3.2 | 0.1 | 0.8 |
| Scheduled Tribe | 1.7 | 3.2 | 0.1 | 4.6 | 0.0 | 0.4 |
| General Caste | 8.2 | 15.2 | 10.8 | 7.4 | 1.4 | 5.8 |
| Family Composition |  |  |  |  |  |  |
| Nuclear | 10.4 | 19.3 | 8.6 | 13.3 | 2.2 | 8.1 |
| Extended | 1.2 | 2.8 | 0.2 | 2.1 | 0.7 | 0.0 |
| Joint | 9.4 | 5.2 | 28.1 | 4.4 | 0.2 | 10.1 |
| Occupation |  |  |  |  |  |  |
| Yes | 14.0 | 17.0 | 22.9 | 15.7 | 2.2 | 12.1 |
| No | 7.0 | 10.4 | 14.0 | 4.0 | 0.9 | 6.1 |
| Have BPL Card |  |  |  |  |  |  |
| Yes | 4.7 | 6.6 | 4.1 | 5.2 | 0.0 | 7.7 |
| No | 16.1 | 20.6 | 32.5 | 14.5 | 2.9 | 10.5 |
| Total | 21.0 | 27.3 | 36.8 | 19.7 | 3.1 | 18.2 |

Figure 4.6: Percentage of Respondents who could Recall the Little Girl TV Ad by Gender and Place of Residence

$\mathrm{N}:$ Total=3,148, Rural=2,190, Urban=958

As presented in Figure 4.6,30\% of males and $34 \%$ of female respondents in urban areas were reached by the Little Girl ad on TV. More males (23\%) than females (18\%) were reached. Further analysis of the data on all those who were exposed to any one of the media spots ( $\mathrm{n}=939$ ), revealed that the penetration of the Little Girl ad on TV was high with as many as $66 \%$ of the respondents watching it.

Data were also analyzed to understand the reach of the Little Girl TV ad based on all who are regular TV viewers (at least once a week).

Figure 4.7: Percentage of Respondents Who Watch TV and Had Seen Little Girl TV Ad for VBD by Gender and Place of Residence


The overall reach of Little Girl ad on TV increased from 21\% to 32\% when looking at all respondents ( $n=3,148$ ) as compared with those who were regular viewers of TV ( $n=1,931$ ). Further insights from the data reveal an increasing trend among females ( $18 \%$ to $30 \%$ ). For females in the rural areas, the proportion increased from $12 \%$ to $23 \%$ for the reach of Little Girl on TV when looked at all respondents as compared with those who were regular TV viewers.

### 4.3.2 Recall of Messages from Little Girl TV Ad

The recall of the Little Girl TV ad was assessed by recall of key messages and the ad's tagline. Table 4.14 below depicts the recall of the ad against key demographic characteristics of the sample population. Of respondents who saw the Little Girl ad on TV, $89 \%(n=543)$ could also recall the key messages or tagline. This suggests the strength of the message delivered by the ad on VBD. Overall more males ( $92 \%$ ) than females ( $84 \%$ ) could recall the ad. The recall was also greater among respondents in the urban areas ( $92 \%$ ) as compared with rural areas ( $86 \%$ ). A closer look into the data suggested that the recall of the Little Girl TV ad was around $98 \%$ among the males in urban areas as against $88 \%$ in the rural areas. Such a differential was less for females ( $85 \%$ among urban females and $82 \%$ among rural females) (Table 4.14).

The state data revealed that respondents from Maharashtra reported the highest recall for the ad ( $95 \%, \mathrm{n}=158$ ), while the lowest was not very far behind in Assam ( $84 \%, \mathrm{n}=148$ ). In Tamil Nadu, the base of respondents to assess recall was very low ( $n=13$ ), so inferences could not be drawn from there. (Table 4.15)

Further disaggregated analysis of the data by education level also suggested that among both males and females, recall increased with increased levels of education. As low as $1 \%$ of respondents who were illiterate and saw the ad could recall its messages/taglines. Recall rose to as high as $22 \%$ among those who were graduates and above among males. Among females, at the same levels, it ranged from 7\% recall among those who were illiterate to about $23 \%$ among those graduates and above. (Table 4.14)

Table 4.14: Recall of the Little Girl TV Ad by Location and Gender

|  |  | Total |  |  | Urban |  |  | Rural |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| $N$ | 610 | 331 | 279 | 245 | 111 | 134 | 365 | 220 | 145 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-27 years | 16.4 | 16.0 | 17.0 | 13.2 | 12.1 | 14.5 | 19.2 | 18.8 | 19.9 |
| 28-37 years | 28.8 | 26.1 | 32.7 | 32.7 | 33.0 | 32.4 | 25.5 | 21.4 | 33.0 |
| 38-47 years | 26.5 | 29.6 | 22.1 | 29.6 | 33.1 | 25.8 | 23.9 | 27.2 | 17.9 |
| 48-57 years | 12.6 | 14.8 | 9.5 | 12.3 | 14.6 | 9.8 | 12.9 | 14.9 | 9.1 |
| 58-65 years | 4.1 | 5.3 | 2.4 | 3.9 | 4.9 | 2.8 | 4.4 | 5.7 | 2.0 |

## Education Level

| Illiterate | $\mathbf{3 . 6}$ | 1.0 | 7.4 | $\mathbf{1 . 5}$ | 0.3 | 2.9 | $\mathbf{5 . 4}$ | 1.5 | 12.5 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Literate with no <br> formal education | $\mathbf{1 . 0}$ | 1.0 | 1.0 | $\mathbf{0 . 2}$ | 0.4 | 0.0 | $\mathbf{1 . 7}$ | 1.5 | 2.1 |
| Primary <br> (Class V completed) | $\mathbf{1 0 . 4}$ | 12.6 | 7.3 | $\mathbf{4 . 6}$ | 6.9 | 2.0 | $\mathbf{1 5 . 4}$ | 16.6 | 13.4 |
| Middle <br> (Class VIII completed) | $\mathbf{1 0 . 5}$ | 10.3 | 10.8 | $\mathbf{9 . 4}$ | 8.6 | 10.4 | $\mathbf{1 1 . 4}$ | 11.5 | 11.3 |
| Secondary <br> (Class X completed) | $\mathbf{2 1 . 8}$ | 24.1 | 18.5 | $\mathbf{2 0 . 4}$ | 19.3 | 21.7 | $\mathbf{2 3 . 0}$ | $\mathbf{2 7 . 5}$ | 14.8 |
| Senior secondary <br> (Class XII completed) | $\mathbf{1 9 . 4}$ | 21.5 | 16.3 | $\mathbf{2 5 . 6}$ | 34.8 | 15.6 | $\mathbf{1 4 . 1}$ | 12.4 | 17.1 |
| Graduate from <br> college and above | $\mathbf{1 9 . 5}$ | 19.0 | 20.3 | $\mathbf{2 5 . 6}$ | 22.9 | 28.5 | $\mathbf{1 4 . 4}$ | 16.3 | 10.8 |

Religion

| Hindu | 74.3 | 75.2 | 73.2 | 68.4 | 62.7 | 74.6 | 79.4 | 83.7 | 71.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Muslim | 8.5 | 8.8 | 8.2 | 11.2 | 15.9 | 6.2 | 6.2 | 3.8 | 10.5 |
| Christian | 0.9 | 1.6 | 0.0 | 1.4 | 2.8 | 0.0 | 0.5 | 0.8 | 0.0 |
| Others | 4.9 | 6.7 | 2.4 | 10.6 | 16.3 | 4.5 | 0.1 | 0.1 | 0.0 |
| Caste |  |  |  |  |  |  |  |  |  |
| Other Backward Caste | 36.6 | 42.9 | 27.6 | 38.8 | 53.5 | 22.9 | 34.7 | 35.5 | 33.1 |
| Scheduled Caste | 11.5 | 11.1 | 12.1 | 16.8 | 16.9 | 16.7 | 7.0 | 7.1 | 6.8 |
| Scheduled Tribe | 6.9 | 10.1 | 2.4 | 1.7 | 3.2 | 0.1 | 11.4 | 14.8 | 5.1 |
| General Caste | 33.3 | 27.7 | 41.3 | 34.3 | 24.1 | 45.2 | 32.5 | 30.2 | 36.7 |
| Family Composition |  |  |  |  |  |  |  |  |  |
| Nuclear | 42.9 | 40.5 | 46.3 | 38.4 | 38.7 | 38.1 | 46.7 | 41.7 | 55.7 |
| Extended | 5.2 | 7.2 | 2.4 | 3.0 | 4.4 | 1.5 | 7.1 | 9.2 | 3.4 |
| Joint | 40.6 | 44.5 | 35.1 | 50.3 | 54.6 | 45.6 | 32.3 | 37.6 | 22.9 |
| Occupation |  |  |  |  |  |  |  |  |  |
| Yes | 61.0 | 85.6 | 26.1 | 57.9 | 89.4 | 23.9 | 63.7 | 83.1 | 28.7 |
| No | 27.7 | 6.6 | 57.6 | 33.8 | 8.3 | 61.4 | 22.4 | 5.4 | 53.3 |
| Have BPL Card |  |  |  |  |  |  |  |  |  |
| Yes | 18.5 | 16.4 | 21.5 | 14.2 | 7.9 | 20.9 | 22.2 | 22.2 | 22.2 |
| No | 69.6 | 75.6 | 61.0 | 77.2 | 89.7 | 63.6 | 63.1 | 65.9 | 58.1 |
| Total | 88.7 | 92.2 | 83.7 | 91.7 | 97.7 | 85.2 | 86.2 | 88.4 | 82.0 |

Analysis by age group of the respondents who saw the Little Girl ad campaign showed that recall declined with increasing respondent age among both males and females, with a plateau at the mid
age-group level. Close to $16 \%$ of respondents aged 18-27 years recalled the Little Girl ad, which increased to around 29\% among those aged 28-37 years and then declined to about 4\% among the oldest group (58-65 years). (Table 4.14)

| Table 4.15: Recall of the Little Girl TV Ad by State |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | State |  |  |  |  |
|  |  | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| $N$ | 610 | 176 | 166 | 152 | 13+ | 103 |
| Age |  |  |  |  |  |  |
| 18-27 years | 16.4 | 14.1 | 11.9 | 17.8 | 4.1 | 29.6 |
| 28-37 years | 28.8 | 22.5 | 35.6 | 29.5 | 30.8 | 24.5 |
| 38-47 years | 26.5 | 25.4 | 33.2 | 19.9 | 31.5 | 22.2 |
| 48-57 years | 12.6 | 14.1 | 11.4 | 13.6 | 19.2 | 10.5 |
| 58-65 years | 4.1 | 7.6 | 2.9 | 3.7 | 0.0 | 2.3 |

Education Level

| Illiterate | $\mathbf{3 . 6}$ | 2.1 | 5.3 | 2.4 | 0.0 | 4.8 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Literate with no formal education | $\mathbf{1 . 0}$ | 2.8 | 0.0 | 1.3 | 0.0 | 0.0 |
| Primary (Class V completed) | $\mathbf{1 0 . 4}$ | 15.1 | 8.3 | 15.1 | 6.7 | 2.4 |
| Middle (Class VIII completed) | $\mathbf{1 0 . 5}$ | 9.0 | 11.6 | 14.1 | 10.9 | 6.6 |
| Secondary (Class X completed) | $\mathbf{2 1 . 8}$ | 18.5 | 21.1 | 29.2 | 7.5 | 22.3 |
| Senior secondary (Class XII com- <br> pleted) | $\mathbf{1 9 . 4}$ | 16.4 | 28.9 | 7.4 | 26.8 | 18.0 |
| Graduate from college and above | $\mathbf{2 2 . 0}$ | 20.2 | 19.8 | 15.2 | 33.8 | 35.0 |


| Religion | $\mathbf{7 4 . 3}$ | 67.9 | 79.3 | 81.2 | 76.7 | 66.5 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Hindu | $\mathbf{8 . 5}$ | 15.7 | 2.8 | 2.1 | 0.0 | 17.1 |
| Muslim | $\mathbf{0 . 9}$ | 0.4 | 0.9 | 1.3 | 9.0 | 0.0 |
| Christian | $\mathbf{4 . 9}$ | 0.0 | 12.0 | 0.0 | 0.0 | 5.5 |
| Others |  |  |  |  |  |  |

## Caste

| Other Backward Caste | $\mathbf{3 6 . 6}$ | 27.5 | 44.1 | 21.9 | 51.6 | 50.2 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Scheduled Caste | $\mathbf{1 1 . 5}$ | 4.4 | 22.4 | 10.2 | 2.6 | 4.5 |
| Scheduled Tribe | $\mathbf{6 . 9}$ | 7.1 | 0.4 | 22.7 | 0.0 | 2.5 |
| General Caste | $\mathbf{3 3 . 3}$ | 44.5 | 27.5 | 29.8 | 31.5 | 31.8 |


| Family Composition |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Nuclear | $\mathbf{4 2 . 9}$ | 59.0 | 21.8 | 54.8 | 57.7 | 42.5 |
| Extended | $\mathbf{5 . 2}$ | 9.0 | 0.6 | 9.9 | 22.1 | 0.0 |
| Joint | $\mathbf{4 0 . 6}$ | 16.0 | 72.5 | 19.9 | 6.0 | 46.7 |


| Occupation | $\mathbf{6 1 . 0}$ | 55.4 | 60.5 | 71.2 | 71.2 | 57.5 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Yes | $\mathbf{2 7 . 7}$ | 28.7 | 34.4 | 13.3 | 14.6 | 31.6 |
| No | $\mathbf{1 8 . 5}$ | 19.7 | 9.9 | 21.9 | 0.0 | 32.7 |
| Have BPL Card | $\mathbf{6 9 . 6}$ | 63.9 | 84.3 | 62.7 | 78.7 | 56.2 |
| Yes | $\mathbf{8 8 . 7}$ | $\mathbf{8 4 . 0}$ | $\mathbf{9 5 . 0}$ | $\mathbf{8 4 . 6}$ | $\mathbf{8 5 . 7}$ | $\mathbf{8 9 . 1}$ |
| No |  |  |  |  |  |  |

Note: † Low Base

## 4．3．3 Likeability of the Little Girl TV Ad

Apart from the recall of the messaging，it is also important to note whether the messages and their creative delivery received a favorable reaction from the intended recipients．The success of the campaign can often be predicated upon the likeability it may generate among the target audience．The study also measured the likeability of the ad on a Likert scale of 1 （disliked a lot）to 5 （liked a lot）．

|  | Total |  |  |  | Urban |  | Rural |  |  | State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 厄゙ | $\frac{0}{\frac{0}{N}}$ | $\frac{\frac{0}{N}}{\stackrel{0}{\pi}}$ | $\begin{aligned} & \bar{\circ} \mathrm{O} \\ & \hline \end{aligned}$ | $\frac{0}{\frac{0}{2}}$ | $\frac{\frac{0}{N}}{\stackrel{0}{\pi}}$ | $\begin{aligned} & \text { 厄" } \\ & \hline 1 \end{aligned}$ | $\frac{0}{\frac{1}{2}}$ | $\frac{\frac{0}{0}}{\stackrel{\pi}{\pi}}$ |  |  | $\frac{\frac{\pi}{5}}{\frac{5}{0}}$ |  |  |
| $N$ | 610 | 331 | 279 | 245 | 111 | 134 | 365 | 220 | 145 | 176 | 166 | 152 | 13t | 103 |
| To what extent did you like the ad？ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Liked it a lot | 60.6 | 62.7 | 57.7 | 54.6 | 54.5 | 54.7 | 65.9 | 68.4 | 61.3 | 57.9 | 40.0 | 81.4 | 53.9 | 82.9 |
| Liked it a little | 32.1 | 34.7 | 28.5 | 34.3 | 43.3 | 25.1 | 30.2 | 28.9 | 32.6 | 40.2 | 43.7 | 14.1 | 41.6 | 15.7 |
| Neither liked nor disliked it | 4.2 | 1.3 | 8.1 | 5.4 | 1.0 | 9.8 | 3.1 | 1.6 | 6.0 | 1.9 | 8.1 | 3.6 | 0.0 | 1.4 |
| Disliked it a little | 1.5 | 0.5 | 2.9 | 3.2 | 1.2 | 5.2 | 0.0 | 0.0 | 0.0 | 0.0 | 4.4 | 0.0 | 0.0 | 0.0 |
| Disliked it a lot | 0.7 | 0.2 | 1.4 | 1.3 | 0.0 | 2.6 | 0.2 | 0.3 | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 | 0.0 |
| Mean | 4.52 | 4.6 | 4.4 | 4.39 | 4.51 | 4.27 | 4.62 | 4.66 | 4.55 | 4.56 | 4.17 | 4.79 | 4.56 | 4.81 |
| Standard <br> Deviation | 0.72 | 0.57 | 0.87 | 0.84 | 0.59 | 1.03 | 0.57 | 0.54 | 0.61 | 0.53 | 0.92 | 0.49 | 0.51 | 0.43 |

Note：$\dagger$ Low Base

Analysis of the data showed that close to $90 \%$（ $\mathrm{n}=549$ ）of the total respondents who saw the Little Girl ad on TV liked the ad．On a Likert scale of 1－5 with 5 being the highest score on likeability，the ad scored a mean of 4.52 overall（ $\mathrm{SD}=0.72$ ）．The small standard deviation in the mean responses suggested the minimal variation in the data on responses and unanimous likeability across the sample（Table 4．16）．

Analysis of the likeability by gender for the Little GirlTV ad suggested that close to $97 \%$（Mean＝4．61， $\mathrm{SD}=0.57$ ）of the males liked it against around $86 \%$（Mean＝4．42， $\mathrm{SD}=0.87$ ）of females．Further analysis across location suggested that more respondents in the rural areas（ $96 \%, \mathrm{n}=331$ ）than in the urban areas（ $89 \%, \mathrm{n}=218$ ）liked the ad．Among females，around $80 \%$ in the urban areas liked the ad，whereas $94 \%$ females in the rural areas liked the ad．Across the states，the likeability was the highest in Assam（98\％，n＝172）and Uttar Pradesh（99\％， $\mathrm{n}=102$ ）and the lowest in Maharashtra （ $84 \%, \mathrm{n}=139$ ）（Table 4．16）．

## 4．3．4 Little Girl TV Ad Characteristics Liked

To better understand the likeability of the Little Girl ad，respondents were asked for what aspects of the ad they liked．

Table 4.17: Proportion of Respondents who liked Specific Characteristics of the Little Girl TV Ad by Gender, Location, and State

|  | Total |  |  | Urban |  |  | Rural |  |  | State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\frac{0}{\sum_{2}^{\pi}}$ |  |  | $\frac{0}{\frac{10}{2}}$ | $\frac{\stackrel{0}{N 0}}{\stackrel{\pi}{\top}}$ |  | $\frac{0}{\sum_{2}^{10}}$ |  | $\begin{aligned} & \varepsilon \\ & \text { EV } \\ & \text { K } \end{aligned}$ |  | $\begin{aligned} & \frac{\pi}{5} \\ & \frac{5}{0} \end{aligned}$ |  | $\stackrel{\frac{\overline{4}}{0}}{\stackrel{y}{0}}$ |
| $N$ | 610 | 331 | 279 | 245 | 111 | 134 | 365 | 220 | 145 | 176 | 166 | 152 | 13t | 103 |
| Aspects Liked |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| The message | 67.8 | 64.8 | 71.9 | 73.4 | 71.2 | 75.7 | 62.8 | 60.4 | 67.3 | 70.1 | 72.6 | 41.9 | 77.2 | 82.3 |
| The storyline | 42.4 | 37.2 | 49.7 | 34.5 | 23.2 | 46.1 | 49.4 | 46.8 | 54.1 | 42.8 | 28.8 | 72.8 | 15.9 | 38.9 |
| The tagline | 15.3 | 13.5 | 17.8 | 19.3 | 18.7 | 19.9 | 11.7 | 9.9 | 15.1 | 13.3 | 27.4 | 1.0 | 0.0 | 13.4 |
| The context and setting | 2.3 | 0.3 | 5.0 | 2.4 | 0.1 | 4.7 | 2.2 | 0.5 | 5.3 | 0.0 | 5.3 | 0.2 | 0.0 | 2.4 |
| The characters | 44.7 | 36.8 | 55.7 | 46.0 | 25.9 | 66.8 | 43.5 | 44.3 | 42.0 | 36.5 | 40.2 | 40.1 | 51.8 | 69.7 |
| The performance | 14.6 | 14.7 | 14.5 | 10.7 | 6.5 | 15.1 | 18.0 | 20.4 | 13.6 | 30.9 | 7.7 | 9.2 | 0.0 | 11.8 |
| The background music | 4.0 | 1.0 | 8.3 | 7.3 | 1.8 | 12.9 | 1.2 | 0.4 | 2.7 | 2.2 | 1.0 | 0.3 | 9.2 | 16.1 |
| Emotions expressed | 15.8 | 16.3 | 15.1 | 22.3 | 27.1 | 17.3 | 10.1 | 8.9 | 12.3 | 2.7 | 29.2 | 8.0 | 24.7 | 16.9 |

Note: * Multiple Responses $\boldsymbol{\dagger}$ Low Base
Table 4.17 presents a snapshot of the various aspects of Little Girl ad on TV that were reported as being liked by respondents. Close to $68 \%(n=415)$ of the respondents liked the message the ad delivered, with around $42 \%$ liking the storyline, and $45 \%$ liking the characters. The context and setting ( $2 \%$ ) and the background music (4\%) were the least liked aspects of the ad.

The message of the ad was liked more by the females (72\%) than the males (65\%). Looking into the rural-urban divide, the message was more liked by the urban respondents ( $73 \%$ ) than the rural respondents ( $63 \%$ ). The storyline on the other hand was liked more by the rural respondents ( $49 \%$ ) than the urban respondents (35\%).

### 4.4 FOUR DROPS TV AD



### 4.4.1 Reach of Four Drops TV Ad

Analysis of the data (Table 4.18) overall revealed that the close to $11 \%$ of respondents had seen the Four Drops TV ad. Further analysis by gender suggested that the reach of the Four Drops TV ad was higher among the males (14\%) than females (7\%). In the aggregate, more urban respondents (16\%) had seen this particular ad on TV than rural respondents (8\%). Among the males, around $20 \%$ in the urban areas and around $11 \%$ in the rural areas had seen the Four Drops TV ad. Among females, the differential was a little less, with $11 \%$ urban females and $6 \%$ rural females saw the ad.

Table 4.18: Reach of the Four Drops TV Ad by Gender and Location


## Education Level

| Illiterate | $\mathbf{0 . 3}$ | 0.1 | 0.6 | $\mathbf{0 . 2}$ | 0.2 | 0.2 | $\mathbf{0 . 4}$ | 0.0 | 0.8 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Literate with no <br> formal education | $\mathbf{0 . 1}$ | 0.1 | 0.1 | $\mathbf{0 . 1}$ | 0.1 | 0.1 | $\mathbf{0 . 1}$ | 0.1 | 0.2 |
| Primary (Class V com- <br> pleted) | $\mathbf{1 . 2}$ | 1.5 | 0.8 | $\mathbf{0 . 7}$ | 0.9 | 0.5 | $\mathbf{1 . 4}$ | 1.8 | 1.0 |
| Middle (Class VIII <br> Completed) | $\mathbf{1 . 6}$ | 2.4 | 0.8 | $\mathbf{1 . 8}$ | 2.5 | 1.0 | $\mathbf{1 . 6}$ | 2.4 | 0.7 |
| Secondary (Class X <br> completed) | $\mathbf{2 . 0}$ | 2.8 | 1.2 | $\mathbf{3 . 1}$ | 3.9 | 2.0 | $\mathbf{1 . 6}$ | 2.2 | 0.9 |
| Senior secondary <br> (Class XII completed) | $\mathbf{2 . 1}$ | 2.9 | 1.1 | $\mathbf{3 . 5}$ | 5.1 | 1.5 | $\mathbf{1 . 4}$ | 1.9 | 0.9 |
| Graduate from col- <br> lege and above | $\mathbf{2 . 5}$ | 3.1 | 1.9 | $\mathbf{4 . 4}$ | 4.4 | 4.4 | $\mathbf{1 . 7}$ | 2.6 | 0.8 |
| Religion |  |  |  |  |  |  |  |  |  |

## Caste

| Other Backward Caste | $\mathbf{4 . 2}$ | 6.3 | 1.9 | $\mathbf{7 . 1}$ | 11.6 | 1.6 | $\mathbf{3 . 0}$ | 3.8 | 2.0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Scheduled Caste | $\mathbf{1 . 3}$ | 1.9 | 0.7 | $\mathbf{3 . 4}$ | 4.9 | 1.6 | $\mathbf{0 . 4}$ | 0.5 | 0.3 |
| Scheduled Tribe | $\mathbf{0 . 8}$ | 1.2 | 0.4 | $\mathbf{0 . 1}$ | 0.1 | 0.0 | $\mathbf{1 . 2}$ | 1.8 | 0.6 |
| General Caste | $\mathbf{4 . 2}$ | 4.5 | 3.9 | $\mathbf{5 . 1}$ | 3.2 | 7.4 | $\mathbf{3 . 8}$ | 5.1 | 2.5 |
| Family Composition |  |  |  |  |  |  |  |  |  |
| Nuclear | $\mathbf{5 . 7}$ | 6.9 | 4.3 | $\mathbf{7 . 7}$ | 8.6 | 6.6 | $\mathbf{4 . 8}$ | 6.2 | 3.4 |
| Extended | $\mathbf{1 . 0}$ | 1.5 | 0.4 | $\mathbf{1 . 4}$ | 2.0 | 0.7 | $\mathbf{0 . 8}$ | 1.3 | 0.2 |
| Joint |  |  |  |  |  |  |  |  |  |
| Occupation |  |  |  |  |  |  |  |  |  |
| Yes | $\mathbf{4 . 0}$ | 5.5 | 2.2 | $\mathbf{6 . 6}$ | 9.2 | 3.3 | $\mathbf{2 . 8}$ | 3.8 | 1.7 |
| No | $\mathbf{7 . 4}$ | 12.2 | 2.2 | $\mathbf{1 0 . 7}$ | 16.2 | 4.1 | $\mathbf{6 . 0}$ | 10.3 | 1.5 |
| Have BPL Card | $\mathbf{3 . 2}$ | 1.8 | 4.7 | $\mathbf{4 . 9}$ | 3.6 | 6.6 | $\mathbf{2 . 4}$ | 1.0 | 3.9 |
| Yes |  |  |  |  |  |  |  |  |  |
| No | $\mathbf{2 . 5}$ | 2.6 | 2.5 | $\mathbf{2 . 5}$ | 0.7 | 4.6 | $\mathbf{2 . 5}$ | 3.4 | 1.6 |
| Total | $\mathbf{8 . 0}$ | 11.3 | 4.4 | $\mathbf{1 3 . 2}$ | 19.0 | 6.0 | $\mathbf{5 . 8}$ | 7.7 | 3.7 |

Analysis of the state data revealed that the reach was the highest in Maharashtra (15\%) and Assam (14\%) and the lowest in Uttar Pradesh (6\%). (Table 4.19)

Analysis of the data by age group suggested that the reach of this ad was close to $3 \%$ of respondents in each category-18-27 years, 28-37 years, and 38-47 years age group.

|  | Total | State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| $N$ | 3,148 | 649 | 600 | 659 | 621 | 619 |
| Age |  |  |  |  |  |  |
| 18-27 years | 2.7 | 2.4 | 3.9 | 2.8 | 2.2 | 2.2 |
| 28-37 years | 3.0 | 2.5 | 4.4 | 4.0 | 2.2 | 1.8 |
| 38-47 years | 2.9 | 4.1 | 5.0 | 1.6 | 1.8 | 1.9 |
| 48-57 years | 1.4 | 2.5 | 1.4 | 1.5 | 1.3 | 0.4 |
| 58-65 years | 0.7 | 2.3 | 0.3 | 0.1 | 0.5 | 0.0 |
| Education Level |  |  |  |  |  |  |
| Illiterate | 0.3 | 0.4 | 0.5 | 0.1 | 0.0 | 0.8 |
| Literate with no formal education | 0.1 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 |
| Primary (Class V completed) | 1.2 | 2.6 | 1.7 | 1.2 | 0.6 | 0.1 |
| Middle (Class VIII completed) | 1.6 | 3.0 | 2.2 | 1.7 | 0.8 | 0.5 |
| Secondary (Class X completed) | 2.0 | 2.2 | 1.9 | 3.1 | 1.8 | 1.1 |
| Senior secondary (Class XII completed) | 2.1 | 2.0 | 4.3 | 1.7 | 1.1 | 1.3 |
| Graduate from college and above | 3.2 | 3.4 | 4.3 | 2.3 | 3.8 | 2.4 |
| Religion |  |  |  |  |  |  |
| Hindu | 8.6 | 12.3 | 10.7 | 9.6 | 6.6 | 3.8 |
| Muslim | 0.9 | 1.6 | 0.4 | 0.4 | 0.2 | 1.8 |
| Christian | 0.3 | 0.0 | 0.3 | 0.0 | 1.1 | 0.0 |
| Others | 0.8 | 0.0 | 3.6 | 0.1 | 0.0 | 0.6 |
| Caste |  |  |  |  |  |  |
| Other Backward Caste | 4.2 | 4.4 | 5.2 | 2.2 | 6.3 | 3.2 |
| Scheduled Caste | 1.3 | 0.4 | 4.2 | 0.9 | 0.7 | 0.5 |
| Scheduled Tribe | 0.8 | 1.4 | 0.2 | 2.4 | 0.1 | 0.0 |
| General Caste | 4.2 | 7.7 | 5.3 | 4.7 | 0.8 | 2.4 |
| Family Composition |  |  |  |  |  |  |
| Nuclear | 5.7 | 9.5 | 4.3 | 5.6 | 6.0 | 2.9 |
| Extended | 1.0 | 2.2 | 0.1 | 1.3 | 1.2 | 0.0 |
| Joint | 4.0 | 2.2 | 10.6 | 3.3 | 0.7 | 3.3 |
| Occupation |  |  |  |  |  |  |
| Yes | 7.4 | 8.4 | 9.3 | 8.6 | 7.6 | 3.3 |
| No | 3.2 | 5.5 | 5.8 | 1.5 | 0.3 | 2.9 |
| Have BPL Card |  |  |  |  |  |  |
| Yes | 2.5 | 4.7 | 1.9 | 2.2 | 0.3 | 3.3 |
| No | 8.0 | 9.1 | 13.0 | 7.9 | 7.5 | 2.9 |
| Total | 10.6 | 13.9 | 15.0 | 10.1 | 7.9 | 6.2 |

Figure 4.8: Percentage of Respondents who could Recall Aspects of the Four Drops TV Ad by Gender and Place of Residence


As presented in Figure 4.8, close to $20 \%$ of males and around $11 \%$ of female respondents in urban areas were reached by the Four Drops TV ad. Overall, more males (14\%) than females (7\%) were reached by this particular media spot. Data analysis of all those exposed to the ad demonstrated penetration was as high as $32 \%(n=300)$ among respondents.

The data were also analyzed to understand the TV ad's reach among all respondents who were regular TV viewers of (at least once a week).

Figure 4.9: Percentage of Respondents who Watch TV and had seen the Four Drops TV Ad by Gender and Place of Residence


N: Total=1,931, Rural=1,109, Urban=822
The overall reach of the Four Drops TV ad increased from $11 \%$ to $17 \%$ examining all respondents and those who were regular viewers of TV, respectively. For females in the rural areas, the proportion increased from $5 \%$ to $11 \%$ for the reach of Four Drops TV ad when looked at all base and base of media habits (regular TV viewers).

### 4.4.2 Recall of Messages from Four Drops TV Ad

The recall of the Four Drops TV ad was assessed by recall of the key messages and the tagline that the ad delivered. Table 4.20 below depicts the recall of the Four Drops ad on TV against key demographic

Table 4.20: Recall of the Four Drops TV Ad by Gender and Location

|  | Total |  |  | Urban |  |  | Rural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| $N$ | 292 | 178 | 114 | 120 | 73 | 47 | 172 | 105 | 67 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-27 years | 21.1 | 21.3 | 20.5 | 22.8 | 24.0 | 20.0 | 19.7 | 19.1 | 20.9 |
| 28-37 years | 24.1 | 22.3 | 28.3 | 25.1 | 26.6 | 21.7 | 23.4 | 18.8 | 33.7 |
| 38-47 years | 24.7 | 23.9 | 26.3 | 30.8 | 29.2 | 34.3 | 19.7 | 19.6 | 19.9 |
| 48-57 years | 12.3 | 13.5 | 9.6 | 9.9 | 9.5 | 10.8 | 14.2 | 16.7 | 8.7 |
| 58-65 years | 5.3 | 6.1 | 3.5 | 4.7 | 4.7 | 4.7 | 5.8 | 7.2 | 2.6 |

## Education Level

| Illiterate | $\mathbf{2 . 8}$ | 0.6 | 7.8 | $\mathbf{1 . 2}$ | 1.1 | 1.3 | $\mathbf{4 . 1}$ | 0.1 | 13.0 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Literate with no <br> formal education | $\mathbf{0 . 9}$ | 0.6 | 1.8 | $\mathbf{0 . 5}$ | 0.5 | 0.5 | $\mathbf{1 . 3}$ | 0.6 | 2.9 |
| Primary (Class V <br> completed) | $\mathbf{8 . 6}$ | 8.5 | 8.7 | $\mathbf{4 . 7}$ | 4.8 | 4.4 | $\mathbf{1 1 . 8}$ | 11.6 | 12.2 |
| Middle (Class VIII <br> completed) | $\mathbf{1 2 . 9}$ | 13.8 | 11.1 | $\mathbf{1 1 . 1}$ | 11.8 | 9.3 | $\mathbf{1 4 . 5}$ | 15.4 | 12.5 |
| Secondary (Class X <br> completed) | $\mathbf{1 7 . 1}$ | 17.0 | 17.3 | $\mathbf{1 7 . 8}$ | 17.4 | 18.7 | $\mathbf{1 6 . 5}$ | 16.6 | 16.2 |
| Senior secondary <br> (Class XII completed) | $\mathbf{1 5 . 8}$ | 17.7 | 11.4 | $\mathbf{1 9 . 6}$ | 23.1 | 11.7 | $\mathbf{1 2 . 6}$ | 13.2 | 11.2 |
| Graduate from col- <br> lege and above | $\mathbf{2 2 . 7}$ | 21.8 | 24.9 | $\mathbf{2 6 . 5}$ | 22.1 | 36.5 | $\mathbf{1 9 . 7}$ | 21.6 | 15.5 |


| Religion |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hindu | 70.6 | 69.2 | 73.9 | 61.6 | 57.3 | 71.6 | 78.0 | 78.9 | 75.8 |
| Muslim | 7.0 | 5.4 | 10.5 | 10.4 | 10.1 | 11.1 | 4.1 | 1.5 | 10.1 |
| Christian | 2.0 | 2.9 | 0.0 | 3.6 | 5.2 | 0.0 | 0.7 | 0.9 | 0.0 |
| Others | 7.9 | 9.7 | 3.9 | 17.6 | 21.5 | 8.7 | 0.0 | 0.0 | 0.0 |
| Caste |  |  |  |  |  |  |  |  |  |
| Other Backward Caste | 35.0 | 39.4 | 25.1 | 41.6 | 53.4 | 14.7 | 29.7 | 28.0 | 33.5 |
| Scheduled Caste | 11.1 | 13.2 | 6.3 | 20.7 | 24.6 | 11.6 | 3.3 | 3.9 | 2.0 |
| Scheduled Tribe | 6.1 | 6.9 | 4.2 | 0.1 | 0.0 | 0.4 | 11.0 | 12.6 | 7.3 |
| General Caste | 35.0 | 27.2 | 52.7 | 30.9 | 16.0 | 64.8 | 38.4 | 36.4 | 43.0 |
| Family Composition |  |  |  |  |  |  |  |  |  |
| Nuclear | 47.2 | 42.5 | 57.9 | 46.8 | 40.9 | 60.1 | 47.6 | 43.9 | 56.1 |
| Extended | 7.5 | 9.0 | 4.2 | 6.6 | 7.6 | 4.4 | 8.2 | 10.1 | 4.0 |
| Joint | 32.7 | 35.6 | 26.3 | 39.9 | 45.6 | 26.9 | 26.9 | 27.4 | 25.7 |
| Occupation |  |  |  |  |  |  |  |  |  |
| Yes | 59.5 | 74.5 | 25.6 | 62.9 | 76.8 | 31.1 | 56.8 | 72.7 | 21.1 |
| No | 27.9 | 12.5 | 62.7 | 30.4 | 17.2 | 60.3 | 26.0 | 8.7 | 64.7 |
| Have BPL Card |  |  |  |  |  |  |  |  |  |
| Yes | 18.2 | 12.1 | 31.9 | 15.5 | 3.7 | 42.6 | 20.3 | 19.0 | 23.3 |
| No | 68.9 | 74.7 | 55.9 | 77.5 | 90.4 | 48.2 | 61.9 | 61.8 | 62.1 |
| Total | 87.5 | 87.1 | 88.3 | 93.3 | 94.1 | 91.5 | 82.7 | 81.4 | 85.8 |

characteristics of the sample population. Of all the respondents who saw the Four Drops TV ad on, around $88 \%$ ( $n=257$ ) could also recall the ad's messages or tagline. This suggests the strength of the message been delivered by the ad on VBD. Overall, recall of the ad was similar across gender variables
(88\%). Recall was greater among respondents in urban areas (93\%) as compared with rural areas (82\%). Looking into the differential of males and females across locations, the data revealed that 94\% of males in urban areas as compared with $81 \%$ in the rural areas recalled the TV ad. Among females, around $92 \%$ in urban areas and $86 \%$ in rural areas recalled any of the ad's key messages.

Analysis of the state data revealed that participants from Maharashtra reported the highest recall for the ad ( $100 \%$, $n=59$ ), while the lowest recall was in Uttar Pradesh ( $80 \%, n=35$ ). In all the states, it was seen that at least 8 out of 10 respondents who saw the ad could also recall any of the key messages (Table 4.21).

Table 4.21: Recall of the Four Drops TV Ad by State

|  | Total | State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| $N$ | 292 | 77 | 59 | 65 | 47 | 44 |
| Age |  |  |  |  |  |  |
| 18-27 years | 21.1 | 12.0 | 26.2 | 21.6 | 19.7 | 31.1 |
| 28-37 years | 24.1 | 18.3 | 29.4 | 32.8 | 20.8 | 15.0 |
| 38-47 years | 24.7 | 24.2 | 33.0 | 16.2 | 19.5 | 27.3 |
| 48-57 years | 12.3 | 13.6 | 9.2 | 15.0 | 16.6 | 6.4 |
| 58-65 years | 5.3 | 13.1 | 2.2 | 1.5 | 5.9 | 0.2 |
| Education Level |  |  |  |  |  |  |
| Illiterate | 2.8 | 2.4 | 3.1 | 1.3 | 0.0 | 9.2 |
| Literate with no formal education | 0.9 | 2.4 | 0.8 | 0.0 | 0.0 | 0.6 |
| Primary (Class V completed) | 8.6 | 12.1 | 11.1 | 8.6 | 4.4 | 0.0 |
| Middle (Class VIII completed) | 12.9 | 12.8 | 14.8 | 16.1 | 9.8 | 7.6 |
| Secondary (Class X completed) | 17.1 | 14.5 | 12.9 | 28.9 | 13.4 | 17.3 |
| Senior secondary (Class XII completed) | 15.8 | 14.4 | 28.7 | 11.9 | 7.3 | 6.0 |
| Graduate from college and above | 29.3 | 22.4 | 28.7 | 20.3 | 47.8 | 39.3 |
| Religion |  |  |  |  |  |  |
| Hindu | 70.6 | 73.5 | 71.3 | 82.1 | 71.0 | 42.0 |
| Muslim | 7.0 | 7.5 | 2.4 | 4.0 | 2.1 | 27.7 |
| Christian | 2.0 | 0.0 | 2.2 | 0.0 | 9.5 | 0.0 |
| Others | 7.9 | 0.0 | 24.2 | 1.0 | 0.0 | 10.3 |
| Caste |  |  |  |  |  |  |
| Other Backward Caste | 35.0 | 28.9 | 34.4 | 21.4 | 65.7 | 35.2 |
| Scheduled Caste | 11.1 | 2.6 | 27.9 | 3.9 | 9.4 | 6.2 |
| Scheduled Tribe | 6.1 | 6.5 | 1.4 | 19.6 | 0.0 | 0.5 |
| General Caste | 35.0 | 43.1 | 35.5 | 42.2 | 7.5 | 38.1 |
| Family Composition |  |  |  |  |  |  |
| Nuclear | 47.2 | 56.3 | 28.4 | 52.8 | 62.5 | 41.0 |
| Extended | 7.5 | 15.2 | 0.9 | 7.5 | 11.4 | 0.0 |
| Joint | 32.7 | 9.6 | 70.7 | 26.8 | 8.6 | 39.0 |
| Occupation |  |  |  |  |  |  |
| Yes | 59.5 | 43.8 | 61.7 | 75.4 | 79.0 | 38.9 |
| No | 27.9 | 37.3 | 38.3 | 11.7 | 3.5 | 41.0 |
| Have BPL Card |  |  |  |  |  |  |
| Yes | 18.2 | 24.3 | 12.5 | 15.1 | 3.8 | 41.0 |
| No | 68.9 | 56.5 | 86.4 | 72.0 | 78.8 | 39.0 |
| Total | 87.5 | 81.1 | 100.0 | 87.1 | 82.6 | 80.0 |

Further disaggregated analysis by education level showed that among both males and females, recall increased with increased levels of education. As low as $1 \%$ of the respondents who were illiterate and who saw the ad could recall its messages or taglines. Recall rose to as high as 29\% among those graduates and above male respondents. Among females, at the same levels, it ranged from $8 \%$ recall among those who were illiterate to around $30 \%$ among those graduates and above (Table 4.21).

Analysis by age group showed that recall declined with increasing age of the respondent, among both males and females, with a plateau at the mid age group. Close to $21 \%$ of respondents in the age bracket of 18-27 years recalled aspects of the Four Drops ad, which increased to around $24 \%$ among those aged 28-37 years, and then declined to about 5\% among the oldest group aged 58-65 years (Table 4.21).

### 4.4.3 Likeability of the Four Drops TV Ad

Apart from the recall of messages, it is important to note whether the messages and creative content received a favorable reaction from the intended recipients. The success of the campaign can often be predicated upon the likeability it may generate among the target audience. The study measured the likeability of the ad on a Likert scale of 1 (disliked a lot) to 5 (liked a lot).

|  | Total |  |  | Urban |  |  | Rural |  |  | State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { §" } \\ & \stackrel{y}{\circ} \end{aligned}$ | $\frac{0}{\sum_{2}^{\pi}}$ |  |  | $\frac{0}{\frac{1}{2}}$ | $$ |  | $\frac{0}{\frac{10}{2}}$ | $\frac{\Delta}{N}$ | $\begin{aligned} & \underline{\varepsilon} \\ & \text { 苞 } \end{aligned}$ | 0 <br> $\frac{0}{5}$ <br> $\frac{0}{5}$ <br> $\frac{0}{0}$ <br> 0 | $\frac{\stackrel{\pi}{4}}{\frac{\sqrt[4]{0}}{0}}$ |  |  |
| $N$ | 292 | 178 | 114 | 120 | 73 | 47 | 172 | 105 | 67 | 77 | 59 | 65 | 47 | 44 |
| To what extent did you like the ad? |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Liked it a lot | 69.3 | 70.2 | 67.1 | 71.9 | 74.4 | 66.6 | 67.1 | 66.8 | 67.6 | 64.4 | 60.7 | 85.4 | 76.5 | 63.8 |
| Liked it a little | 23.5 | 21.5 | 27.7 | 23.1 | 21.4 | 26.8 | 23.7 | 21.6 | 28.5 | 27.2 | 36.4 | 6.8 | 18.6 | 20.1 |
| Neither liked nor disliked it | 3.0 | 3.4 | 2.0 | 2.7 | 2.4 | 3.4 | 3.2 | 4.3 | 0.8 | 0.9 | 1.7 | 4.4 | 0.0 | 11.2 |
| Disliked it a little | 1.8 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 3.4 | 4.9 | 0.0 | 6.5 | 0.5 | 0.0 | 0.0 | 0.0 |
| Disliked it a lot | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.6 | 0.0 | 0.0 | 0.8 | 0.0 | 0.0 | 0.0 |
| Mean | 4.63 | 4.62 | 4.67 | 4.71 | 4.73 | 4.65 | 4.57 | 4.52 | 4.69 | 4.51 | 4.56 | 4.84 | 4.8 | 4.55 |
| Standard <br> Deviation | 0.66 | 0.71 | 0.51 | 0.51 | 0.5 | 0.55 | 0.75 | 0.84 | 0.48 | 0.82 | 0.64 | 0.48 | 0.4 | 0.7 |

Close to $93 \%(n=272)$ of the total respondents who saw the Four Drops ad on TV also liked the ad. On a Likert scale of 1-5 with 5 being the highest score on likeability, the ad scored a mean of 4.63 overall ( $\mathrm{SD}=0.66$ ). The small standard deviation in the mean responses also suggested the minimal variation in the data on responses and unanimous likeability across the sample (Table 4.22).

Analysis of the likeability for the Four Drops TV ad by gender suggested that close to $92 \%$ (Mean=4.62, $\mathrm{SD}=0.71$ ) of the males liked it against $95 \%$ (Mean=4.67, $\mathrm{SD}=0.51$ ) of females. Further analysis of the data across location suggested that more respondents in urban areas ( $95 \%, n=114$ ) than in rural areas $(91 \%, n=157)$ liked the ad. The differential for liking was higher
among males in urban areas (96\%) than in the rural areas (88\%). Among females, the gap in liking across location was less, with $93 \%$ of urban female and $96 \%$ of rural females liking the Four Drops TV ad for VBD.

Across the states, the ad's likeability was the highest in Maharashtra ( $97 \%$, N=59) and Tamil Nadu ( $95 \%, \mathrm{~N}=47$ ) and the lowest in Uttar Pradesh ( $83 \%, \mathrm{~N}=44$ ) (Table 4.22).

### 4.4.4 Four Drops TV Ad Characteristics Liked

To better understand the likeability of the Four Dropsad, respondents were also asked about what aspects of the ad they liked.

|  | Total |  |  |  | Urban |  |  | Rural |  |  |  | State |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\frac{0}{\sum_{2}^{01}}$ | $\begin{aligned} & \frac{0}{N 0} \\ & \stackrel{N}{U N} \end{aligned}$ | $\begin{aligned} & \overline{\mathrm{O}} \\ & \stackrel{1}{\circ} \end{aligned}$ | $\frac{0}{\frac{10}{2}}$ |  | $\stackrel{\overline{\mathrm{O}}}{\stackrel{1}{\circ}}$ | $\frac{0}{\frac{N}{2}}$ |  |  | $\begin{aligned} & \frac{0}{5} \\ & \frac{5}{5} \\ & \frac{0}{0} \\ & \frac{0}{0} \\ & \frac{\pi}{0} \end{aligned}$ | $\frac{\frac{\pi}{3}}{\frac{5}{0}}$ |  | $\frac{5}{4}$ <br> $\frac{1}{0}$ <br> 0 <br> 0 <br> 5 |
| $N$ | 292 | 178 | 114 | 120 | 73 | 47 | 172 | 105 | 67 | 77 | 59 | 65 | 47 | 44 |
| Aspects Liked |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| The message | 74.5 | 72.2 | 79.5 | 76.9 | 76.0 | 78.7 | 72.5 | 69.0 | 80.2 | 78.1 | 91.5 | 47.0 | 88.3 | 58.5 |
| The storyline | 35.0 | 27.7 | 50.7 | 23.2 | 11.4 | 47.5 | 45.1 | 41.2 | 53.6 | 44.0 | 26.6 | 51.4 | 10.2 | 37.7 |
| The tagline | 15.4 | 13.9 | 18.6 | 22.5 | 23.8 | 19.7 | 9.4 | 5.8 | 17.6 | 10.0 | 40.5 | 1.8 | 0.0 | 13.2 |
| The context and setting | 4.6 | 3.3 | 7.4 | 5.6 | 6.1 | 4.6 | 3.8 | 1.0 | 10.0 | 1.0 | 5.7 | 0.0 | 13.5 | 6.7 |
| The characters | 25.3 | 19.0 | 39.0 | 23.8 | 12.6 | 46.9 | 26.7 | 24.3 | 32.1 | 25.9 | 24.1 | 26.7 | 3.6 | 49.9 |
| The performance | 16.4 | 15.5 | 18.2 | 12.4 | 8.7 | 20.2 | 19.7 | 21.2 | 16.4 | 35.8 | 11.6 | 9.8 | 2.3 | 13.1 |
| The background music | 2.6 | 0.0 | 8.2 | 5.5 | 0.0 | 16.9 | 0.1 | 0.0 | 0.4 | 0.0 | 0.2 | 0.0 | 0.0 | 19.9 |
| Emotions expressed | 12.8 | 13.3 | 11.5 | 25.3 | 29.3 | 17.1 | 2.1 | 0.1 | 6.5 | 0.0 | 27.0 | 0.0 | 8.1 | 34.3 |

Note: *Multiple Responses

Table 4.23 presents a snapshot of the various aspects of Four Drops TV ad that were reported as being liked by respondents who saw the ad. Analysis suggested that close to $75 \%$ ( $n=218$ ) of the respondents liked the message delivered by the ad, with around $35 \%$ liking the storyline, and $25 \%$ liking the characters. The context and setting (5\%) and the background music of the ad (3\%) were the least liked aspects of the ad.

The ad's message was liked in greater proportion by females ( $80 \%$ ) than the males ( $72 \%$ ). Looking into the rural/urban divide, the message was liked in greater proportion by urban respondents ( $77 \%$ ) than the rural respondents ( $73 \%$ ). The storyline on the other hand was liked more by the rural respondents ( $45 \%$ ) than the urban respondents ( $23 \%$ ).

### 4.5 LITTLE GIRL RADIO AD

The Little Girl radio ad was another component of the VBD campaign assessed by the study.

### 4.5.1 Reach of Little Girl Radio Ad

Analysis of the data (Table 4.24) overall revealed that the close to $13 \%$ of respondents had listened to the Little Girl radio ad. Further analysis by gender suggested that the reach of the Little Girl ad on radio was higher among males (17\%) than females (10\%). In the aggregate, more rural respondents (14\%) had listened to this particular ad than urban respondents (12\%). Among the males, more in the rural areas (19\%) had listened to the radio ad than in the urban areas (12\%). Among females, the proportion of those who listened to the radio ad was higher in the urban areas (12\%) than in the rural areas (9\%).

Table 4.24: Reach of the Little Girl Radio Ad by Location and Gender

|  | Total |  |  | Urban |  |  | Rural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| $N$ | 3,148 | 1,565 | 1,583 | 958 | 465 | 493 | 2,190 | 1,100 | 1,090 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-27 years | 2.6 | 3.2 | 1.8 | 2.0 | 2.1 | 1.8 | 2.8 | 3.7 | 1.8 |
| 28-37 years | 4.0 | 4.6 | 3.3 | 4.1 | 4.8 | 3.1 | 4.0 | 4.5 | 3.4 |
| 38-47 years | 3.6 | 4.1 | 3.0 | 3.5 | 2.4 | 4.8 | 3.7 | 4.9 | 2.3 |
| 48-57 years | 2.1 | 3.1 | 1.0 | 1.8 | 2.1 | 1.3 | 2.2 | 3.6 | 0.8 |
| 58-65 years | 1.1 | 1.5 | 0.8 | 0.8 | 0.2 | 1.4 | 1.3 | 2.1 | 0.5 |
| Education Level |  |  |  |  |  |  |  |  |  |
| Illiterate | 1.0 | 0.9 | 1.3 | 0.7 | 0.7 | 0.7 | 1.2 | 0.9 | 1.5 |
| Literate with no formal education | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.0 | 0.4 | 0.3 | 0.4 |
| Primary (Class V completed) | 1.7 | 2.3 | 1.1 | 0.5 | 0.8 | 0.0 | 2.3 | 3.0 | 1.5 |
| Middle (Class VIII completed) | 2.9 | 4.1 | 1.5 | 3.2 | 4.5 | 1.7 | 2.7 | 3.9 | 1.5 |
| Secondary <br> (Class X completed) | 3.4 | 4.6 | 2.1 | 2.9 | 3.1 | 2.7 | 3.6 | 5.3 | 1.9 |
| Senior secondary (Class XII completed) | 1.8 | 1.9 | 1.6 | 1.5 | 1.0 | 2.2 | 1.9 | 2.4 | 1.4 |
| Graduate from college and above | 2.2 | 2.5 | 1.8 | 2.9 | 1.6 | 4.6 | 1.9 | 2.9 | 0.7 |
| Religion |  |  |  |  |  |  |  |  |  |
| Hindu | 11.3 | 14.1 | 8.2 | 7.6 | 5.4 | 10.4 | 12.9 | 18.2 | 7.2 |
| Muslim | 1.9 | 2.3 | 1.5 | 4.0 | 6.4 | 1.1 | 1.0 | 0.4 | 1.7 |
| Christian | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 |
| Others | 0.2 | 0.0 | 0.2 | 0.4 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 |
| Caste |  |  |  |  |  |  |  |  |  |
| Other Backward Caste | 6.9 | 9.3 | 4.2 | 6.6 | 9.1 | 3.6 | 7.0 | 9.3 | 4.4 |
| Scheduled Caste | 1.1 | 1.6 | 0.6 | 0.7 | 0.4 | 1.0 | 1.3 | 2.1 | 0.5 |
| Scheduled Tribe | 1.6 | 2.7 | 0.3 | 0.3 | 0.1 | 0.6 | 2.1 | 3.9 | 0.2 |
| General Caste | 3.8 | 2.9 | 4.8 | 4.4 | 2.1 | 7.2 | 3.5 | 3.3 | 3.8 |
| Family Composition |  |  |  |  |  |  |  |  |  |
| Nuclear | 7.8 | 8.5 | 7.0 | 6.6 | 6.6 | 6.7 | 8.3 | 9.4 | 7.2 |
| Extended | 0.8 | 1.5 | 0.0 | 0.3 | 0.6 | 0.0 | 1.0 | 1.9 | 0.0 |
| Joint | 4.8 | 6.6 | 2.9 | 5.1 | 4.6 | 5.7 | 4.7 | 7.5 | 1.7 |
| Occupation |  |  |  |  |  |  |  |  |  |
| Yes | 9.6 | 16.2 | 2.2 | 8.0 | 11.7 | 3.4 | 10.3 | 18.3 | 1.8 |
| No | 3.8 | 0.4 | 7.7 | 4.1 | 0.1 | 9.0 | 3.7 | 0.6 | 7.1 |
| Have BPL Card |  |  |  |  |  |  |  |  |  |
| Yes | 4.6 | 6.0 | 3.0 | 2.4 | 0.9 | 4.3 | 5.6 | 8.4 | 2.5 |
| No | 8.7 | 10.5 | 6.7 | 9.4 | 10.8 | 7.7 | 8.4 | 10.4 | 6.4 |
| Total | 13.4 | 16.6 | 9.9 | 12.0 | 11.8 | 12.4 | 14.0 | 18.8 | 8.9 |

Analysis of the state data revealed that the reach was the highest in Uttar Pradesh (29\%) and Assam (15\%) and the lowest in Tamil Nadu (2\%).

Analysis by age group suggested that the reach of this ad on VBD was close to $3 \%$ among respondents in each of the categories of 18-27 years, 28-37 years, and 38-47 years age groups. Further analyzing the data by whether the respondent had worked in the past 12 months, it was reported among males in both rural and urban areas that the ad reached those who worked in greater proportion and vice versa for females (wherein those not working were reached in greater proportion) (Table 4.24). Around $11 \%$ of males in the urban areas who worked had listened to Little Girl radio ad as against less than $1 \%$ of those who had not worked.

Table 4.25: Reach of the Little Girl Radio Ad by State


Figure 4.10: Percentage of Respondents who could Recall Aspects of the Little Girl Radio Ad by Gender and Place of Residence


N: Total=3,148, Rural=2,190, Urban=958

As presented in Figure 4.10, close to $12 \%$ of all respondents in the urban areas were reached by the Little Girl radio ad. When analyzed by gender, more males (17\%) than females (10\%) were reached by the particular media spot. Of all those who were exposed to any one of the media spots, penetration of Little Girl radio ad was as high as $39 \%(n=366)$ among respondents.

Data were also analyzed to understand the radio ad's reach among those respondents who were regular listeners of radio (at least once a week).

Figure 4.11: Percentage of Respondents who Listened to Radio and Heard the Little Girl Radio Ad by Gender and Place of Residence


The overall reach of Little Girl radio ad increased from $17 \%$ to $56 \%$ when comparing reach among all respondents and those who were regular radio listeners. Further insights from the data revealed an increasing similar trend among females ( $9 \%$ to $47 \%$ ) and males ( $17 \%$ to $56 \%$ ). For females in rural areas, the proportion increased from $9 \%$ to $38 \%$ for the reach of Little Girl radio ad when comparing all base and those who were regular radio listeners.

### 4.5.2 Recall of Messages from the Little Girl Radio Ad

Respondent recall of the radio ad was assessed by their remembering key messages and the tagline that the ad delivered. Table 4.26 depicts the recall of the Little Girl radio ad against key demographic characteristics of the sample population. Of all the respondents who heard the Little Girl radio ad, around $96 \%$ ( $n=352$ ) could recall the messages or tagline of the ad. This suggests the strength of the message been delivered by the ad on VBD. Differences in recall by gender were minimal, with male

|  | Total |  |  | Urban |  |  | Rural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| $N$ | 367 | 214 | 153 | 95 | 40 | 55 | 272 | 174 | 98 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-27 years | 17.9 | 18.2 | 17.4 | 16.4 | 17.9 | 14.5 | 18.5 | 18.3 | 19.0 |
| 28-37 years | 27.9 | 25.9 | 31.5 | 33.4 | 41.0 | 24.6 | 25.8 | 21.5 | 35.5 |
| 38-47 years | 26.6 | 25.0 | 29.5 | 27.7 | 20.8 | 35.7 | 26.1 | 26.2 | 26.0 |
| 48-57 years | 14.9 | 18.6 | 8.0 | 14.7 | 18.3 | 10.6 | 14.9 | 18.7 | 6.5 |
| 58-65 years | 8.5 | 9.0 | 7.6 | 6.3 | 2.0 | 11.3 | 9.4 | 11.1 | 5.5 |
| Education Level |  |  |  |  |  |  |  |  |  |
| Illiterate | 7.3 | 5.1 | 11.2 | 5.8 | 5.7 | 5.9 | 7.8 | 5.0 | 14.2 |
| Literate with no formal education | 1.7 | 1.5 | 2.0 | 0.5 | 0.9 | 0.0 | 2.1 | 1.7 | 3.1 |
| Primary (Class V completed) | 12.4 | 13.9 | 9.4 | 3.9 | 7.1 | 0.2 | 15.5 | 15.9 | 14.6 |
| Middle (Class VIII completed) | 20.1 | 23.4 | 14.0 | 25.6 | 38.4 | 10.7 | 18.1 | 19.0 | 15.9 |
| Secondary (Class X completed) | 24.5 | 26.1 | 21.4 | 23.9 | 26.4 | 21.0 | 24.7 | 26.0 | 21.6 |
| Senior secondary (Class XII completed) | 13.0 | 11.1 | 16.6 | 12.8 | 8.2 | 18.1 | 13.1 | 11.9 | 15.8 |
| Graduate from college and above | 16.1 | 15.0 | 18.0 | 24.3 | 13.3 | 37.1 | 13.0 | 15.5 | 7.3 |
| Religion |  |  |  |  |  |  |  |  |  |
| Hindu | 81.1 | 82.2 | 78.8 | 62.0 | 45.8 | 80.8 | 88.2 | 92.9 | 77.8 |
| Muslim | 13.5 | 14.0 | 12.4 | 33.1 | 54.2 | 8.6 | 6.1 | 2.3 | 14.5 |
| Christian | 0.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.6 | 0.0 |
| Others | 1.0 | 0.0 | 2.7 | 3.4 | 0.0 | 7.4 | 0.0 | 0.0 | 0.2 |
| Caste |  |  |  |  |  |  |  |  |  |
| Other Backward Caste | 49.7 | 54.0 | 41.5 | 54.8 | 77.4 | 28.4 | 47.7 | 47.2 | 48.9 |
| Scheduled Caste | 7.9 | 9.5 | 5.1 | 4.6 | 3.7 | 5.7 | 9.2 | 11.2 | 4.8 |
| Scheduled Tribe | 11.4 | 16.0 | 3.1 | 2.9 | 1.1 | 5.0 | 14.7 | 20.3 | 2.0 |
| General Caste | 26.5 | 16.9 | 44.2 | 36.3 | 17.9 | 57.7 | 22.8 | 16.6 | 36.6 |
| Family Composition |  |  |  |  |  |  |  |  |  |
| Nuclear | 56.1 | 50.6 | 66.3 | 53.8 | 55.9 | 51.4 | 56.9 | 49.1 | 74.6 |
| Extended | 5.4 | 8.2 | 0.1 | 2.8 | 5.3 | 0.0 | 6.3 | 9.0 | 0.2 |
| Joint | 34.3 | 37.9 | 27.7 | 41.9 | 38.8 | 45.4 | 31.5 | 37.6 | 17.7 |
| Occupation |  |  |  |  |  |  |  |  |  |
| Yes | 68.8 | 94.3 | 21.6 | 65.9 | 99.2 | 27.2 | 69.9 | 92.8 | 18.5 |
| No | 26.9 | 2.5 | 72.4 | 32.6 | 0.8 | 69.6 | 24.8 | 2.9 | 74.0 |
| Have BPL Card |  |  |  |  |  |  |  |  |  |
| Yes | 32.2 | 34.5 | 28.0 | 19.1 | 7.8 | 32.2 | 37.2 | 42.3 | 25.6 |
| No | 63.1 | 62.2 | 64.6 | 77.7 | 92.2 | 60.8 | 57.6 | 53.5 | 66.8 |
| Total | 95.8 | 96.7 | 94.0 | 98.5 | 100.0 | 96.8 | 94.7 | 95.7 | 92.5 |

recall at $97 \%$ and female recall $94 \%$. The recall was also seen to be better among the respondents in the urban areas (99\%) than in the rural areas (95\%). When data were analyzed by gender and location together, minimal differences in recall were seen among both males and females in rural and urban areas (Table 4.26).

Analysis of the state data revealed that Maharashtra reported the highest recall of the ad ( $98 \%, \mathrm{n}=47$ ), while the lowest was in Odisha ( $94 \%$, $\mathrm{n}=60$ ) (Table 4.27).

|  | Total | State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| $N$ | 367 | 105 | 48 | 64 | 12t | 138 |
| Age |  |  |  |  |  |  |
| 18-27 years | 17.9 | 17.0 | 6.6 | 13.4 | 0.0 | 25.1 |
| 28-37 years | 27.9 | 23.5 | 35.2 | 35.8 | 2.3 | 26.3 |
| 38-47 years | 26.6 | 27.6 | 36.5 | 22.4 | 17.4 | 25.5 |
| 48-57 years | 14.9 | 15.2 | 16.1 | 15.6 | 67.1 | 10.3 |
| 58-65 years | 8.5 | 13.1 | 3.8 | 6.9 | 3.9 | 8.6 |
| Education Level |  |  |  |  |  |  |
| Illiterate | 7.3 | 2.4 | 4.4 | 0.5 | 0.0 | 14.2 |
| Literate with no formal education | 1.7 | 3.9 | 0.0 | 2.9 | 0.0 | 0.6 |
| Primary (Class V completed) | 12.4 | 19.2 | 5.0 | 11.3 | 4.7 | 12.0 |
| Middle (Class VIII completed) | 20.1 | 17.3 | 13.8 | 27.2 | 68.4 | 16.9 |
| Secondary (Class X completed) | 24.5 | 20.4 | 31.6 | 31.7 | 8.6 | 22.4 |
| Senior secondary (Class XII completed) | 13.0 | 17.0 | 21.7 | 7.6 | 9.0 | 11.0 |
| Graduate and above | 16.9 | 16.3 | 21.6 | 12.9 | 0.0 | 18.8 |
| Religion |  |  |  |  |  |  |
| Hindu | 81.1 | 75.9 | 98.1 | 92.5 | 65.0 | 74.7 |
| Muslim | 13.5 | 20.4 | 0.0 | 1.7 | 16.3 | 18.9 |
| Christian | 0.3 | 0.0 | 0.0 | 0.0 | 9.3 | 0.0 |
| Others | 1.0 | 0.2 | 0.0 | 0.0 | 0.0 | 2.2 |
| Caste |  |  |  |  |  |  |
| Other Backward Caste | 49.7 | 25.2 | 68.6 | 20.6 | 22.5 | 71.8 |
| Scheduled Caste | 7.9 | 7.4 | 0.5 | 11.0 | 13.5 | 8.7 |
| Scheduled Tribe | 11.4 | 10.1 | 0.5 | 44.9 | 3.7 | 1.2 |
| General Caste | 26.5 | 52.7 | 28.5 | 17.6 | 51.0 | 14.1 |
| Family Composition |  |  |  |  |  |  |
| Nuclear | 56.1 | 85.1 | 21.3 | 52.1 | 68.2 | 52.1 |
| Extended | 5.4 | 1.5 | 0.0 | 24.4 | 13.5 | 0.0 |
| Joint | 34.3 | 9.9 | 76.9 | 17.6 | 9.0 | 43.7 |
| Occupation |  |  |  |  |  |  |
| Yes | 68.8 | 49.7 | 59.3 | 82.3 | 90.7 | 74.3 |
| No | 26.9 | 46.8 | 38.8 | 11.9 | 0.0 | 21.5 |
| Have BPL Card |  |  |  |  |  |  |
| Yes | 32.2 | 30.8 | 15.5 | 44.1 | 0.0 | 35.1 |
| No | 63.1 | 65.7 | 78.9 | 50.0 | 90.7 | 60.7 |
| Total | 95.8 | 96.5 | 98.1 | 94.1 | 90.7 | 95.8 |

Note: $\dagger$ Low Base

Further disaggregated analysis of the data by education level also demonstrated that among both males and females, recall increased with increased levels of education. As low as $5 \%$ of the respondents who were illiterate and who saw the ad could recall its messages or taglines. This is in comparison with recall as high as $15 \%$ among male graduates and above. Among females, at the same levels, recall ranged from $11 \%$ among illiterate respondents to around $19 \%$ among graduates and above. When comparing recall of the Little Girl TV and radio ads, the difference in recall among literate and illiterate respondents was less for the radio ad (Table 4.26).

Analysis by respondent age group pointed to declining recall with increasing age of the respondent, both among the males and females, with a plateau at the mid age group. Close to $18 \%$ of the respondents in the age bracket of 18-27 years recalled the Little Girl radio ad, which increased to around $28 \%$ among those aged $28-37$ years, and then declined to about $9 \%$ among the oldest group of 58-65 years (Table 4.26).

### 4.5.3 Little Girl Radio Ad Likeability

Apart from the recall of the messaging, it is important to note whether the messages and creative treatment of the ad received a favorable reaction from the intended recipients. The success of the campaign can often be predicated upon the likeability it may generate among the target audience. The study measured the likeability of the ad on a Likert scale of 1 (disliked a lot) to 5 (liked a lot).

|  | Total |  |  |  | Urban |  |  | Rural |  |  |  | State |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 厄゙ | $\frac{0}{\frac{1}{2}}$ | $\frac{\frac{0}{N}}{\underset{\sim}{0}}$ | ٪ँ | $\frac{0}{\sum_{10}^{10}}$ |  | ؟"̃ | $\frac{0}{\frac{10}{2}}$ | $\begin{aligned} & \frac{0}{N} \\ & \frac{\Xi}{\mathbb{N}} \end{aligned}$ |  | $\begin{aligned} & \frac{0}{y} \\ & \frac{5}{y} \\ & \frac{0}{0} \\ & \frac{0}{0} \\ & \frac{0}{0} \\ & \hline 0 \end{aligned}$ | $\begin{aligned} & \frac{\pi}{\frac{4}{0}} \\ & \frac{5}{0} \end{aligned}$ |  |  |
| $N$ | 367 | 214 | 153 | 95 | 40 | 55 | 272 | 174 | 98 | 105 | 48 | 64 | 12t | 138 |
| To what extent did you like the ad? |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Liked it a lot | 69.3 | 71.6 | 65.1 | 70.0 | 74.3 | 65.3 | 69.0 | 70.8 | 65.0 | 65.7 | 33.4 | 83.7 | 60.7 | 77.1 |
| Liked it a little | 24.0 | 26.7 | 19.0 | 18.3 | 25.7 | 10.2 | 26.2 | 27.0 | 24.4 | 31.4 | 41.7 | 16.3 | 39.3 | 16.5 |
| Neither liked nor disliked it | 3.2 | 1.2 | 6.8 | 0.4 | 0.0 | 0.9 | 4.3 | 1.6 | 10.5 | 2.2 | 0.5 | 0.0 | 0.0 | 6.4 |
| Disliked it a little | 0.5 | 0.0 | 1.3 | 1.7 | 0.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 0.0 |
| Disliked it a lot | 1.8 | 0.3 | 4.7 | 6.0 | 0.0 | 12.4 | 0.2 | 0.3 | 0.0 | 0.0 | 13.4 | 0.0 | 0.0 | 0.0 |
| Mean | 4.6 | 4.7 | 4.43 | 4.5 | 4.74 | 4.22 | 4.64 | 4.68 | 4.55 | 4.64 | 3.85 | 4.84 | 4.61 | 4.71 |
| Standard Deviation | 0.75 | 0.52 | 1.03 | 1.06 | 0.44 | 1.44 | 0.59 | 0.54 | 0.68 | 0.53 | 1.35 | 0.37 | 0.51 | 0.58 |

Note: $\dagger$ Low Base

Analysis of the data showed that close to $93 \%$ ( $\mathrm{n}=341$ ) of the total respondents who heard the Little Girl radio ad liked the ad. On a Likert scale of $1-5$ with 5 being the highest score on likeability, the ad scored a mean of 4.60 overall ( $\mathrm{SD}=0.75$ ). The small standard deviation in the mean responses also suggested the minimal variation in the data on responses and unanimous likeability across the sample (Table 4.28).

Analysis of the likeability by gender suggested that close to $98 \%$（Mean＝4．70，SD＝0．52）of the males liked it as compared with $84 \%$（Mean＝4．43， $\mathrm{SD}=1.03$ ）of females．Further analysis across location suggested that more respondents in the rural areas（ $95 \%, \mathrm{n}=258$ ）than in the urban areas（ $88 \%, \mathrm{n}=87$ ） liked the ad．The difference in likeability of the ad was minimal（ $2 \%$ ）among males in urban and rural areas．But，among females，around $75 \%$ in urban areas liked the ad as compared with $90 \%$ in the rural areas．Across the states，the likeability of the ad was the highest in Odisha $(100 \%, \mathrm{n}=64)$ and the lowest in Maharashtra（ $75 \%, \mathrm{n}=36$ ）（Table 4．28）．

## 4．5．4 Characteristics that were Liked for the Little Girl Radio Ad

To better understand the likeability of the Little Girl radio ad among respondents，they were asked what aspects of the ad they liked．

|  |  | Total＊ |  |  | Urban＊ |  |  | Rural＊ |  |  |  | State＊ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 厄゙ | $\frac{0}{\sum_{2}^{N}}$ | $\begin{aligned} & \frac{0}{\widetilde{\pi}} \\ & \frac{\underset{\sim}{\omega}}{} \end{aligned}$ |  | $\frac{0}{\sum_{2}^{N}}$ |  | $\begin{aligned} & \text { 厄" } \\ & \stackrel{0}{\circ} \end{aligned}$ | $\frac{0}{\sum_{2}^{\pi}}$ |  | $\begin{aligned} & \underline{E} \\ & \text { E } \\ & \text { B } \end{aligned}$ | $\frac{5}{\frac{0}{5}}$ | $\begin{aligned} & \frac{0}{\frac{5}{0}} \\ & \frac{5}{0} \end{aligned}$ |  | － $\frac{5}{0}$ 0 0 0 0 0 5 |
| $N$ | 367 | 214 | 153 | 95 | 40 | 55 | 272 | 174 | 98 | 105 | 48 | 64 | 12t | 138 |
| Aspects Liked |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| The message | 63.8 | 61.6 | 67.9 | 72.9 | 73.7 | 72.0 | 60.3 | 58.1 | 65.3 | 70.1 | 69.3 | 36.6 | 100.0 | 68.2 |
| The storyline | 37.9 | 30.9 | 50.4 | 40.4 | 29.1 | 52.6 | 36.8 | 31.4 | 49.1 | 38.0 | 46.6 | 52.0 | 8.6 | 30.7 |
| The tagline | 8.7 | 7.3 | 11.2 | 11.5 | 7.5 | 15.8 | 7.6 | 7.2 | 8.4 | 11.0 | 17.0 | 0.2 | 0.0 | 9.1 |
| The context and setting | 2.2 | 1.7 | 3.1 | 2.8 | 0.0 | 5.8 | 2.0 | 2.2 | 1.4 | 0.0 | 7.7 | 0.0 | 0.0 | 2.7 |
| The characters | 26.5 | 25.2 | 28.8 | 34.9 | 17.1 | 54.1 | 23.2 | 27.6 | 13.5 | 22.8 | 32.4 | 15.3 | 0.0 | 33.4 |
| The performance | 9.9 | 11.4 | 7.1 | 7.8 | 5.5 | 10.2 | 10.7 | 13.2 | 5.2 | 27.4 | 2.0 | 6.6 | 0.0 | 5.2 |
| The back－ ground music | 6.7 | 4.3 | 11.1 | 12.3 | 0.0 | 25.5 | 4.6 | 5.6 | 2.4 | 2.4 | 1.2 | 6.3 | 0.0 | 11.6 |
| Emotions expressed | 8.7 | 6.6 | 12.5 | 14.3 | 9.6 | 19.4 | 6.5 | 5.7 | 8.2 | 0.0 | 8.2 | 12.4 | 9.0 | 11.8 |

Note：＊Multiple，Responses $\boldsymbol{\dagger}$ Low Base

Table 4.29 presents a snapshot of the various aspects of the Little Girl radio ad that respondents reported having liked．Close to $64 \%(n=235)$ of the respondents liked the message delivered by the ad，with around $38 \%$ liking the storyline，and $27 \%$ liking the characters in the ad．The context and setting（ $2 \%$ ）and the background music of the ad（ $7 \%$ ）were the least liked aspects．

The ad＇s message was liked in greater proportion by the females（68\％）than the males（62\％）．Looking into the rural－urban divide，the message was liked in greater proportion by the urban respondents （73\％）than the rural respondents（60\％）．

## 4．6 FOUR DROPS RADIO AD

The Four Drops radio ad was one of the components of the VBD campaign that was assessed．

### 4.6.1 Reach of Four Drops Radio Ad

Analysis of the data (Table 4.30) overall revealed that close to $6 \%$ of the respondents had heard the Four Drops radio ad. Analysis by gender suggested that the ad's reach by radio was slightly higher among the males ( $7 \%$ ) than females ( $5 \%$ ). In the aggregate, a marginally higher percentage of urban respondents ( $7 \%$ ) had heard this particular radio ad than rural respondents ( $6 \%$ ). Analysis with gender and location in conjunction revealed that around $8 \%$ of the females in the urban areas had listened to the Four Drops radio ad as compared with $4 \%$ in the rural areas, a differential of around $50 \%$.

|  | Total |  |  | Urban |  |  | Rural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| $N$ | 3148 | 1565 | 1583 | 958 | 465 | 493 | 2190 | 1100 | 1090 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-27 years | 1.5 | 1.9 | 1.1 | 1.6 | 2.0 | 1.2 | 1.5 | 1.8 | 1.1 |
| 28-37 years | 1.2 | 1.2 | 1.2 | 1.7 | 1.8 | 1.5 | 0.9 | 0.9 | 1.0 |
| 38-47 years | 1.8 | 1.8 | 1.7 | 2.1 | 0.6 | 3.9 | 1.6 | 2.3 | 0.9 |
| 48-57 years | 1.2 | 1.7 | 0.6 | 1.3 | 2.0 | 0.5 | 1.1 | 1.6 | 0.6 |
| 58-65 years | 0.6 | 0.9 | 0.3 | 0.5 | 0.1 | 1.0 | 0.6 | 1.3 | 0.0 |
| Education Level |  |  |  |  |  |  |  |  |  |
| Illiterate | 0.3 | 0.1 | 0.4 | 0.1 | 0.0 | 0.2 | 0.3 | 0.2 | 0.5 |
| Literate with no formal education | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 |
| Primary (Class V completed) | 0.8 | 0.7 | 0.9 | 0.0 | 0.0 | 0.0 | 1.1 | 1.0 | 1.2 |
| Middle (Class VIII completed) | 1.1 | 1.7 | 0.4 | 1.6 | 2.2 | 1.0 | 0.8 | 1.4 | 0.2 |
| Secondary (Class X completed) | 1.6 | 2.0 | 1.1 | 2.5 | 2.5 | 2.4 | 1.2 | 1.8 | 0.5 |
| Senior secondary (Class XII completed) | 0.5 | 0.6 | 0.4 | 0.3 | 0.5 | 0.1 | 0.6 | 0.7 | 0.5 |
| Graduate from college and above | 1.8 | 2.1 | 1.6 | 2.4 | 1.2 | 3.9 | 1.6 | 2.5 | 0.6 |
| Religion |  |  |  |  |  |  |  |  |  |
| Hindu | 5.3 | 6.4 | 4.1 | 5.2 | 4.2 | 6.4 | 5.4 | 7.5 | 3.1 |
| Muslim | 0.7 | 0.8 | 0.5 | 1.3 | 1.9 | 0.7 | 0.4 | 0.3 | 0.4 |
| Others | 0.3 | 0.1 | 0.2 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Caste |  |  |  |  |  |  |  |  |  |
| Other Backward Caste | 2.9 | 3.9 | 1.6 | 3.5 | 4.6 | 2.2 | 2.6 | 3.6 | 1.4 |
| Scheduled Caste | 0.4 | 0.6 | 0.3 | 0.6 | 1.0 | 0.1 | 0.4 | 0.4 | 0.4 |
| Scheduled Tribe | 0.6 | 0.9 | 0.4 | 0.3 | 0.1 | 0.5 | 0.8 | 1.3 | 0.3 |
| General Caste | 2.2 | 1.8 | 2.6 | 2.8 | 0.8 | 5.2 | 1.9 | 2.3 | 1.5 |
| Family Composition |  |  |  |  |  |  |  |  |  |
| Nuclear | 3.7 | 4.1 | 3.3 | 3.8 | 3.3 | 4.5 | 3.7 | 4.5 | 2.8 |
| Extended | 0.4 | 0.6 | 0.1 | 0.4 | 0.7 | 0.0 | 0.4 | 0.6 | 0.1 |
| Joint | 2.1 | 2.6 | 1.5 | 3.0 | 2.5 | 3.5 | 1.7 | 2.7 | 0.7 |
| Occupation |  |  |  |  |  |  |  |  |  |
| Yes | 4.2 | 6.9 | 1.2 | 4.4 | 6.3 | 1.9 | 4.1 | 7.2 | 0.9 |
| No | 2.0 | 0.5 | 3.7 | 2.8 | 0.1 | 6.1 | 1.6 | 0.6 | 2.7 |
| Have BPL Card |  |  |  |  |  |  |  |  |  |
| Yes | 2.1 | 2.1 | 2.1 | 2.0 | 0.2 | 4.2 | 2.1 | 3.0 | 1.2 |
| No | 4.0 | 5.2 | 2.6 | 4.9 | 6.3 | 3.3 | 3.5 | 4.7 | 2.3 |
| Total | 6.2 | 7.4 | 4.9 | 7.2 | 6.5 | 8.0 | 5.8 | 7.8 | 3.6 |

Analysis of the state data at the state level revealed that the reach was highest in Uttar Pradesh (11\%) and Assam (8\%) and the lowest in Tamil Nadu (3\%). (Table 4.31).

Analysis of the data by age group suggested that the reach of this ad on VBD was close to $1 \%-2 \%$ of respondents in each of the categories of 18-27 years, 28-37 years, and 38-47 years age group. In the rural areas, around $7 \%$ of the males who worked in the last 12 months had listened to the Four Drops ad on VBD on radio, whereas this was with less than 1\%among those who did not work.

Table 4.31: Reach of the Four Drops Radio Ad by State

|  | Total | State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| $N$ | 3,148 | 649 | 600 | 659 | 621 | 619 |
| Age |  |  |  |  |  |  |
| 18-27 years | 1.5 | 1.6 | 0.5 | 0.9 | 0.4 | 4.1 |
| 28-37 years | 1.2 | 1.1 | 1.0 | 1.1 | 1.0 | 1.5 |
| 38-47 years | 1.8 | 2.9 | 1.5 | 0.7 | 0.3 | 3.3 |
| 48-57 years | 1.2 | 1.6 | 1.2 | 0.8 | 1.2 | 1.1 |
| 58-65 years | 0.6 | 1.1 | 0.0 | 0.4 | 0.3 | 1.1 |
| Education Level |  |  |  |  |  |  |
| Illiterate | 0.3 | 0.1 | 0.4 | 0.1 | 0.0 | 0.2 |
| Literate with no formal education | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.0 |
| Primary (Class V completed) | 0.8 | 0.7 | 0.9 | 0.0 | 0.0 | 0.0 |
| Middle (Class VIII completed) | 1.1 | 1.7 | 0.4 | 1.6 | 2.2 | 1.0 |
| Secondary (Class X completed) | 1.6 | 2.0 | 1.1 | 2.5 | 2.5 | 2.4 |
| Senior secondary (Class XII completed) | 0.5 | 0.6 | 0.4 | 0.3 | 0.5 | 0.1 |
| Graduate from college and above | 1.8 | 2.1 | 1.6 | 2.4 | 1.2 | 3.9 |
| Religion |  |  |  |  |  |  |
| Hindu | 5.3 | 6.4 | 4.1 | 5.2 | 4.2 | 6.4 |
| Muslim | 0.7 | 0.8 | 0.5 | 1.3 | 1.9 | 0.7 |
| Others | 0.3 | 0.1 | 0.2 | 0.6 | 0.4 | 1.0 |
| Caste |  |  |  |  |  |  |
| Other Backward Caste | 2.9 | 1.9 | 2.5 | 1.2 | 2.0 | 6.9 |
| Scheduled Caste | 0.4 | 0.3 | 0.4 | 0.0 | 0.8 | 0.8 |
| Scheduled Tribe | 0.6 | 0.7 | 0.0 | 2.1 | 0.0 | 0.3 |
| General Caste | 2.2 | 5.4 | 1.3 | 0.6 | 0.4 | 3.2 |
| Family Composition |  |  |  |  |  |  |
| Nuclear | 3.7 | 7.2 | 1.2 | 2.3 | 1.9 | 5.9 |
| Extended | 0.4 | 0.0 | 0.0 | 1.1 | 0.8 | 0.0 |
| Joint | 2.1 | 1.2 | 3.1 | 0.6 | 0.5 | 5.3 |
| Occupation |  |  |  |  |  |  |
| Yes | 4.2 | 4.9 | 2.5 | 2.8 | 3.0 | 7.9 |
| No | 2.0 | 3.4 | 1.8 | 1.1 | 0.2 | 3.3 |
| Have BPL Card |  |  |  |  |  |  |
| Yes | 2.1 | 1.8 | 0.9 | 1.4 | 0.0 | 6.3 |
| No | 4.0 | 6.6 | 2.9 | 2.5 | 3.0 | 4.8 |
| Total | 6.2 | 8.4 | 4.3 | 3.9 | 3.2 | 11.2 |

Figure 4.12: Percentage of Respondents who could Recall Aspects of the Four Drops Radio Ad by Gender and Place of Residence

$\mathrm{N}:$ Total=3,148, Rural=2,190, Urban=958

As presented in Figure 4.12, over 6\% of the males and $8 \%$ of the female respondents in the urban areas were reached by the Four Drops radio ad. When analyzed by gender differentials, more males (7\%) than females (5\%) were reached by the particular media spot. Further based on all those who were exposed to any one of the media spots, penetration of the Four Drops radio ad was as high as among 19\% ( $n=178$ ) of the respondents.

Data were also analyzed to understand the reach of the radio spot among those who were regular radio listeners (at least once a week).

Figure 4.13: Percentage of Respondents who Listen to Radio and had Heard the Four Drops Radio Ad by Gender and Place of Residence


The overall reach of the Four Drops radio ad increased from $6 \%$ to $21 \%$ when looked at all respondents as compared with those who were regular radio listeners. For females in the rural areas, the proportion increased from $4 \%$ to $26 \%$ for the reach of the radio ad when looking at all base and regular radio listeners.

### 4.6.2 Recall of Messages from the Four Drops Radio Ad

The recall of the Four Drops radio ad was assessed by recall of the key messages and the tagline that the ad delivered. Table 4.32 below depicts the recall of ad against key demographic characteristics of the sample population. Of all the respondents who saw the Four Drops radio ad, about 86\% ( $\mathrm{n}=137$ )could also recall the messages or tagline of the ad. This suggests the strength of the message delivered by the ad on VBD. Gender did not have much of a differential impact in recall with males

## Table 4.32: Recall of the Four Drops Radio Ad by Location and Gender

|  | Total |  |  | Urban |  |  | Rural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female | Total | Male | Female |
| $N$ | 159 | 87 | 72 | 57 | 27t | 30 | 102 | 60 | 42 |
| Age |  |  |  |  |  |  |  |  |  |
| 18-27 years | 22.0 | 24.0 | 18.6 | 22.7 | 30.6 | 14.7 | 21.7 | 21.4 | 22.2 |
| 28-37 years | 15.4 | 12.5 | 20.3 | 22.7 | 26.2 | 19.3 | 11.4 | 7.2 | 21.2 |
| 38-47 years | 25.3 | 20.6 | 33.2 | 25.8 | 9.0 | 42.6 | 25.0 | 25.2 | 24.7 |
| 48-57 years | 15.2 | 19.9 | 7.4 | 18.0 | 30.4 | 5.8 | 13.7 | 15.8 | 8.9 |
| 58-65 years | 8.2 | 9.7 | 5.7 | 6.9 | 1.9 | 11.9 | 8.9 | 12.7 | 0.0 |
| Education Level |  |  |  |  |  |  |  |  |  |
| Illiterate | 1.9 | 1.8 | 2.2 | 1.1 | 0.0 | 2.1 | 2.4 | 2.5 | 2.2 |
| Literate with no formal education | 1.2 | 1.5 | 0.6 | 0.8 | 1.6 | 0.0 | 1.3 | 1.4 | 1.2 |
| Primary (Class V completed) | 7.0 | 3.6 | 12.7 | 0.1 | 0.0 | 0.3 | 10.7 | 5.1 | 23.9 |
| Middle (Class VIII completed) | 13.5 | 16.6 | 8.2 | 22.0 | 31.4 | 12.6 | 8.9 | 10.8 | 4.3 |
| Secondary (Class X completed) | 24.1 | 27.4 | 18.4 | 31.8 | 39.2 | 24.5 | 19.9 | 22.9 | 12.8 |
| Senior secondary (Class XII completed) | 7.6 | 7.2 | 8.2 | 3.9 | 7.1 | 0.8 | 9.6 | 7.2 | 15.0 |
| Graduate from college and above | 31.0 | 28.6 | 34.9 | 36.4 | 18.8 | 54.0 | 27.9 | 32.3 | 17.7 |
| Religion |  |  |  |  |  |  |  |  |  |
| Hindu | 75.0 | 76.7 | 72.0 | 69.0 | 63.5 | 74.5 | 78.2 | 81.8 | 69.9 |
| Muslim | 8.1 | 8.4 | 7.7 | 18.5 | 28.8 | 8.2 | 2.5 | 0.4 | 7.2 |
| Others | 3.0 | 1.6 | 5.4 | 8.6 | 5.7 | 11.6 | 0.0 | 0.0 | 0.0 |
| Caste |  |  |  |  |  |  |  |  |  |
| Other Backward Caste | 41.4 | 49.7 | 27.5 | 49.1 | 71.1 | 27.2 | 37.2 | 41.3 | 27.7 |
| Scheduled Caste | 6.9 | 7.3 | 6.2 | 8.3 | 15.0 | 1.6 | 6.1 | 4.3 | 10.4 |
| Scheduled Tribe | 7.5 | 9.3 | 4.6 | 2.9 | 0.0 | 5.8 | 10.1 | 12.9 | 3.5 |
| General Caste | 29.5 | 19.1 | 47.0 | 35.9 | 12.0 | 59.7 | 26.0 | 21.9 | 35.5 |
| Family Composition |  |  |  |  |  |  |  |  |  |
| Nuclear | 50.4 | 47.7 | 55.0 | 50.6 | 51.3 | 49.9 | 50.3 | 46.2 | 59.6 |
| Extended | 5.3 | 7.4 | 1.9 | 4.2 | 8.5 | 0.0 | 5.9 | 6.9 | 3.6 |
| Joint | 30.4 | 31.6 | 28.4 | 41.3 | 38.3 | 44.3 | 24.5 | 29.1 | 13.9 |
| Occupation |  |  |  |  |  |  |  |  |  |
| Yes | 59.5 | 81.9 | 21.5 | 59.9 | 95.8 | 24.2 | 59.3 | 76.5 | 19.1 |
| No | 26.6 | 4.7 | 63.7 | 36.2 | 2.3 | 70.1 | 21.4 | 5.7 | 58.0 |
| Have BPL Card |  |  |  |  |  |  |  |  |  |
| Yes | 29.1 | 25.5 | 35.1 | 25.4 | 3.6 | 47.2 | 31.1 | 34.1 | 24.0 |
| No | 54.9 | 60.5 | 45.5 | 67.7 | 94.5 | 41.1 | 48.0 | 47.3 | 49.5 |
| Total | 86.1 | 86.7 | 85.2 | 96.1 | 98.1 | 94.2 | 80.7 | 82.2 | 77.1 |

Note: $\dagger$ Low Base
( $87 \%$ ) and females ( $85 \%$ ). The recall was found to be stronger among respondents in the urban areas ( $96 \%$ ) as compared with rural areas ( $81 \%$ ). The data for females in urban and rural locations revealed that around $94 \%$ of the females in the urban areas recalled any of the key messages of the Four Drops radio ad for VBD as compared with 77\% females in the rural areas (Table 4.33).

Analysis of the data disaggregated by education level found that among males and females recall increased with increased levels of education. As low as $2 \%$ of the respondents who were illiterate, who heard the ad, recalled its messages or taglines. Recall rose to as high as $29 \%$ among male graduates and above. Among females, at the same levels, it ranged from $2 \%$ recall among those who were illiterate to around $35 \%$ among graduates and above. Looking in conjunction with the TV ad of Four Drops, the difference between recall of respondents who were literate and illiterate was less for the radio ad (Table4.32).

Table 4.33: Recall of the Four Drops Radio Ad by State

|  | Total | State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| $N$ | 159 | 48 | 23+ | 23t | 16t | 49 |
| Age |  |  |  |  |  |  |
| 18-27 years | 22.0 | 15.6 | 11.2 | 13.2 | 12.3 | 37.1 |
| 28-37 years | 15.4 | 10.5 | 24.5 | 27.0 | 22.4 | 9.6 |
| 38-47 years | 25.3 | 29.1 | 36.1 | 17.7 | 9.6 | 25.7 |
| 48-57 years | 15.2 | 7.6 | 24.9 | 19.7 | 37.1 | 9.8 |
| 58-65 years | 8.2 | 8.0 | 0.4 | 9.8 | 10.7 | 9.9 |
| Education Level |  |  |  |  |  |  |
| Illiterate | 1.9 | 0.0 | 1.1 | 1.5 | 3.7 | 3.4 |
| Literate with no formal education | 1.2 | 1.9 | 0.0 | 0.7 | 0.0 | 1.5 |
| Primary (Class V completed) | 7.0 | 7.2 | 15.9 | 7.3 | 3.7 | 4.4 |
| Middle (Class VIII completed) | 13.5 | 8.8 | 22.3 | 25.5 | 39.6 | 1.9 |
| Secondary (Class X completed) | 24.1 | 21.4 | 28.2 | 23.4 | 12.3 | 28.3 |
| Senior secondary (Class XII completed) | 7.6 | 8.2 | 11.2 | 5.7 | 12.7 | 5.0 |
| Graduate from college and above | 31.0 | 23.3 | 18.6 | 23.2 | 20.0 | 47.6 |
| Religion |  |  |  |  |  |  |
| Hindu | 75.0 | 62.8 | 89.6 | 84.8 | 92.0 | 70.6 |
| Muslim | 8.1 | 7.9 | 0.0 | 2.6 | 0.0 | 15.7 |
| Others | 3.0 | 0.0 | 7.6 | 0.0 | 0.0 | 5.8 |
| Caste |  |  |  |  |  |  |
| Other Backward Caste | 41.4 | 14.5 | 58.0 | 27.7 | 58.7 | 56.6 |
| Scheduled Caste | 6.9 | 3.9 | 8.7 | 0.0 | 20.6 | 7.1 |
| Scheduled Tribe | 7.5 | 2.4 | 0.0 | 44.4 | 0.0 | 2.9 |
| General Caste | 29.5 | 48.2 | 27.6 | 15.2 | 12.7 | 25.5 |
| Family Composition |  |  |  |  |  |  |
| Nuclear | 50.4 | 62.1 | 27.9 | 55.4 | 56.0 | 46.1 |
| Extended | 5.3 | 0.0 | 0.0 | 24.4 | 20.8 | 0.0 |
| Joint | 30.4 | 8.6 | 69.2 | 7.6 | 15.2 | 46.0 |
| Occupation |  |  |  |  |  |  |
| Yes | 59.5 | 38.9 | 55.4 | 60.6 | 85.1 | 69.5 |
| No | 26.6 | 31.8 | 41.8 | 26.8 | 6.8 | 22.6 |
| Have BPL Card |  |  |  |  |  |  |
| Yes | 29.1 | 12.9 | 19.2 | 29.1 | 0.0 | 53.8 |
| No | 54.9 | 57.8 | 67.2 | 58.3 | 85.1 | 38.2 |
| Total | 86.1 | 70.7 | 97.2 | 87.4 | 92.0 | 92.1 |

Note: $\dagger$ Low Base

Analysis by respondent age group who heard the Four Drops ad campaign on radio demonstrated a decline in recall with increasing age of the respondent, both among the males and females, with a plateau at the mid age group. Close to $15 \%$ of the respondents in the age bracket of $28-37$ years recalled the Four Drops radio ad, which increased to around $25 \%$ among those aged $38-47$ years, and then declined to about 8\% among the most aged group of 58-65 years (Table 4.32).

The states of Maharashtra, Odisha, and Tamil Nadu had smaller samples (less than 30) from which to draw inferences. In Assam, the recall of the Four Drops radio ad was at a rate of $86 \%(n=41)$ of respondents and in Uttar Pradesh, close to $92 \%(n=45)$ of the respondents could recall any of the key messages of the ad (Table4.32).

### 4.6.3 Four Drops Radio Ad Likeability

Apart from the recall of the messaging, it is also important to note whether the messages and creative treatment received a favorable reaction from the intended recipients. The success of the campaign can often be predicated upon the likeability it may generate among the target audience. The study measured the likeability of the ad on a Likert scale of 1 (disliked a lot) to 5 (liked a lot).

The data showed that close to $84 \%(n=134)$ of the total respondents who heard the Four Drops radio ad also liked the ad. On a Likert scale of 1-5 with 5 being the highest score on likeability, the ad scored a mean of 4.30 overall ( $\mathrm{SD}=0.98$ ). The small standard deviation in the mean responses suggested minimal variation in the data on responses and unanimous likeability across the sample (Table 4.34).

Analysis of the likeability for the Four Drops radio ad by gender suggested that close to $82 \%$ (Mean=4.26, SD=1.01) of the males liked it as compared with $89 \%$ (Mean=4.38, SD=0.93) of females. Analysis across location suggested that more respondents in the urban areas $(94 \%, \mathrm{n}=54)$ than in the rural areas ( $79 \%, \mathrm{n}=81$ ) liked the ad (Table 4.34). Analysis by gender and location revealed that all of the males in urban areas liked the ad, as compared with $74 \%$ in the rural areas. Among females, the liking for the ad was more among rural females ( $91 \%$ ) than urban females ( $87 \%$ ).

|  | Total |  |  | Urban |  |  | Rural |  |  | State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \overline{\text { ®® }} \end{aligned}$ | $\frac{0}{\frac{0}{20}}$ | $\frac{\frac{0}{N 0}}{\underset{\sim}{0}}$ | $\stackrel{\text { ® }}{\stackrel{0}{\circ}}$ | $\frac{0}{\sum_{2}^{10}}$ |  |  | $\frac{0}{\sum_{2}^{N}}$ | $\frac{\frac{0}{N 0}}{\stackrel{\pi}{0}}$ |  |  | $\frac{\frac{0}{5}}{\frac{5}{0}}$ |  | $\frac{5}{y}$ <br> $\frac{1}{0}$ <br> 0 <br> 0 <br> 5 |
| $N$ | 159 | 87 | 72 | 57 | 27t | 30 | 102 | 60 | 42 | 48 | $23+$ | $23+$ | $16+$ | 49 |
| To what extent did you like the ad? |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Liked it a lot | 55.9 | 55.0 | 57.4 | 75.4 | 75.9 | 75.0 | 45.2 | 46.8 | 41.4 | 56.7 | 29.0 | 67.1 | 67.3 | 57.7 |
| Liked it a little | 28.5 | 26.6 | 31.8 | 18.3 | 24.1 | 12.4 | 34.1 | 27.5 | 49.4 | 20.1 | 52.2 | 32.9 | 25.9 | 25.5 |
| Neither liked nor disliked it | 7.0 | 8.2 | 5.1 | 0.3 | 0.0 | 0.7 | 10.7 | 11.4 | 9.2 | 1.3 | 0.0 | 0.0 | 6.8 | 16.8 |
| Disliked it a little | 7.2 | 9.7 | 2.8 | 3.0 | 0.0 | 6.0 | 9.4 | 13.5 | 0.0 | 21.9 | 8.0 | 0.0 | 0.0 | 0.0 |
| Disliked it a lot | 1.4 | 0.6 | 2.8 | 3.0 | 0.0 | 6.0 | 0.6 | 0.8 | 0.0 | 0.0 | 10.8 | 0.0 | 0.0 | 0.0 |
| Mean | 4.3 | 4.26 | 4.38 | 4.6 | 4.76 | 4.45 | 4.14 | 4.06 | 4.32 | 4.12 | 3.81 | 4.67 | 4.6 | 4.41 |
| Standard Deviation | 0.98 | 1.01 | 0.93 | 0.89 | 0.43 | 1.17 | 0.99 | 1.1 | 0.64 | 1.21 | 1.27 | 0.48 | 0.63 | 0.77 |

Note: $\dagger$ Low Base

### 4.6.4 Characteristics that were Liked for the Four Drops Radio Ad

To better understand the likeability of the Four Drops radio ad respondents were asked about what aspects of the ad they liked.

Table 4.35 presents a snapshot of the various aspects of the Four Drops radio ad that were liked by the respondents who heard the ad. Analysis suggested that close to $68 \%(n=108)$ of the respondents liked the message delivered by the ad, with around $35 \%$ liking the storyline and $36 \%$ liking the characters in the ad. The context and setting and the background music of the ad (7\%) were the least liked aspects.

|  |  | Total* |  |  | Urban* |  |  | Rura** |  |  |  | State |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 厄゙ | $\frac{0}{\sum_{2}^{01}}$ | $\frac{\frac{0}{N}}{\stackrel{1}{\top}}$ | $\stackrel{\text { ® }}{\stackrel{\circ}{\circ}}$ | $\frac{0}{\sum_{2}^{01}}$ | $\begin{aligned} & \frac{0}{N} \\ & \underset{\Psi}{\top} \\ & \hline \end{aligned}$ |  | $\frac{0}{\sum_{\sum}^{01}}$ |  | $\begin{aligned} & \underline{E} \\ & \stackrel{y}{*} \end{aligned}$ |  | $\begin{aligned} & \frac{\pi}{5} \\ & \frac{5}{0} \end{aligned}$ |  |  |
| $N$ | 159 | 87 | 72 | 57 | 27† | 30 | 102 | 60 | 42 | 48 | 23t | 23t | $16+$ | 49 |
| Aspects Liked |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| The message | 68.1 | 58.3 | 84.6 | 82.6 | 65.1 | 100.0 | 60.2 | 55.7 | 70.7 | 64.7 | 91.5 | 36.5 | 54.4 | 77.7 |
| The storyline | 35.0 | 25.8 | 50.6 | 49.6 | 31.5 | 67.6 | 27.1 | 23.6 | 35.3 | 33.9 | 49.4 | 32.2 | 5.9 | 40.0 |
| The tagline | 10.6 | 9.6 | 12.1 | 12.3 | 17.3 | 7.4 | 9.6 | 6.6 | 16.5 | 6.3 | 23.3 | 0.8 | 0.0 | 15.9 |
| The context and setting | 7.5 | 11.7 | 0.4 | 0.4 | 0.0 | 0.8 | 11.3 | 16.2 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 20.8 |
| The characters | 36.5 | 38.1 | 33.6 | 44.7 | 39.2 | 50.1 | 32.0 | 37.7 | 18.6 | 21.9 | 30.6 | 21.7 | 20.0 | 60.3 |
| The performance | 13.6 | 13.2 | 14.4 | 15.1 | 8.5 | 21.7 | 12.8 | 15.0 | 7.7 | 21.7 | 11.6 | 10.2 | 0.0 | 13.1 |
| The background music | 7.0 | 3.0 | 13.7 | 17.0 | 7.4 | 26.5 | 1.5 | 1.3 | 2.0 | 0.8 | 4.5 | 0.0 | 8.8 | 14.8 |
| Emotions expressed | 13.5 | 11.0 | 17.9 | 18.6 | 8.0 | 29.1 | 10.8 | 12.1 | 7.7 | 0.0 | 12.9 | 0.0 | 1.5 | 32.9 |

Note: *Multiple Responses, $\boldsymbol{\dagger}$ Low Base

The message of the ad was liked more by females (85\%) compared with males (58\%). Looking into the rural-urban divide, the message was liked in greater proportion by urban respondents (82\%) than rural respondents (60\%).

## CHAPTER 5

## IMPACT OF MASS MEDIA CAMPAIGNS ON VBD

This chapter deals with motivation and intention to act on desired behavior after watching the ads


## CHAPTER 5



## IMPACT OF MASS MEDIA CAMPAIGNS ON VBD

This chapter deals with the impact of the mass media campaign by the different media spots on respondent motivation levels around VBD.

### 5.1 EXTENT OF MOTIVATION AMONG ALL EXPOSED TO VBD CAMPAIGN

Table 5.1 presents data on the extent of motivation felt by respondents who were exposed to any component of the media campaign ( $N-947$ ). A relatively higher percentage of males felt motivated to take action (57\%) after campaign exposure compared to females (34\%). Nearly 16\% of females reported no motivation to take any action after campaign exposure as compared to only $3 \%$ males.


For both urban and rural respondents, the motivation levels for blood donation were almost similar after campaign exposure. Close to $47 \%(n=172)$ of urban respondents and $50 \%$ ( $n=305$ ) of rural respondents reported positive motivation toward blood donation after being exposed to the VBD media campaign. Analysis of the state data suggested that the motivation level was the highest among respondents in Odisha ( $93 \%, n=213$ ), followed by Tamil Nadu $(89 \%, n=70)$. The lowest motivation was reported in Uttar Pradesh ( $77 \%, n=168$ ).

### 5.2 INTENDED ACTIONS AFTER VBD CAMPAIGN EXPOSURE

Table 5.2 reflects the different types of action respondents intended to take after campaign exposure. Few differences were found between male and female respondents, except that close to $18 \%$ of females wanted to know more about places to donate blood, as compared with only $8 \%$ of males. Also, around $26 \%$ males mentioned that they would encourage others to donate blood as compared to $18 \%$ of females.

Overall it was seen that the most common intended action post exposure to the VBD campaign was to want to know more about blood donation ( $31 \%$ females and $26 \%$ males). Among females, the next preferred action was that they planned to go for blood donation (27\%). Among males it was to encourage others to donate blood (26\%).

Table 5.2: Intended Actions Post VBD Campaign Exposure by Gender, Location, and State (Percentage Distribution)

|  |  | Male* |  |  | Female* |  |  | State* |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | $\begin{aligned} & \text { پ. } \\ & \stackrel{y}{\circ} \end{aligned}$ | 菏 | $\begin{aligned} & \frac{c}{0} \\ & \text { ò } \end{aligned}$ | $\stackrel{\overline{\mathrm{N}}}{\stackrel{\circ}{0}}$ |  | $\begin{aligned} & \frac{5}{05} \\ & \text { 윽 } \end{aligned}$ | $\begin{aligned} & \underline{E} \\ & \text { E } \\ & \text { 女 } \end{aligned}$ |  | $\frac{\frac{\pi}{4}}{\frac{5}{0}}$ |  |  |
| N | 790 | 501 | 337 | 164 | 289 | 170 | 119 | 197 | 165 | 199 | 69 | 160 |
| Action intended |  |  |  |  |  |  |  |  |  |  |  |  |
| To know more about blood donation | 27.7 | 26.3 | 18.4 | 38.5 | 30.8 | 19.9 | 43.4 | 22.7 | 49.6 | 14.7 | 23.9 | 21.7 |
| To know more about places to donate blood | 11.3 | 8.1 | 7.3 | 9.2 | 18.3 | 12.8 | 24.6 | 3.4 | 16.9 | 12.8 | 9.9 | 11.7 |
| Discuss blood donation with spouse | 11.0 | 10.4 | 10.4 | 10.3 | 12.4 | 16.7 | 7.4 | 20.6 | 12.2 | 2.6 | 13.8 | 7.8 |
| Discuss blood donation with my parent/in-laws | 7.0 | 6.8 | 8.6 | 4.0 | 7.3 | 6.0 | 8.8 | 17.0 | 6.3 | 0.6 | 5.1 | 5.1 |
| Discuss blood donation with friends/peers | 24.6 | 24.6 | 24.4 | 25.0 | 24.6 | 16.7 | 33.9 | 15.5 | 18.9 | 15.5 | 38.3 | 44.4 |
| Visit to a doctor/health care provider for more details/ information on blood donation | 1.9 | 1.9 | 0.6 | 4.0 | 1.7 | 0.3 | 3.3 | 2.1 | 2.8 | 0.0 | 2.7 | 2.2 |
| Plan to go for blood donation | 23.3 | 21.5 | 27.2 | 12.7 | 27.2 | 26.1 | 28.4 | 48.7 | 8.1 | 28.0 | 19.3 | 13.0 |
| Encourage other people to donate | 23.2 | 25.9 | 31.3 | 17.6 | 17.5 | 18.5 | 16.3 | 21.8 | 7.7 | 34.7 | 12.5 | 35.8 |

Note: *Multiple Responses

Further analysis by gender and location suggested that among males around $27 \%(n=91)$ in the rural areas had a plan to go for blood donation as compared with $13 \%(n=21)$ of urban males. Among females, close to $26 \%$ of rural and $28 \%$ of urban females had a plan to go for blood donation. Data suggested that urban males reported in smaller proportion a desire to go for blood donation after campaign exposure than females.

Evidence from the data also suggested that after campaign exposure, the intention to have a plan to go for blood donation was the highest in Assam (49\%, $\mathrm{n}=197$ ), with Odisha $(28 \%, \mathrm{n}=199)$ at the second position, and with Maharashtra ( $8 \%, \mathrm{n}=165$ ) at the lowest position.

### 5.3 REASONS FOR NON-MOTIVATION FOR VBD

Table 5.3 highlights the reasons that respondents were not motivated to take any action for blood donation. Fear of needles was reported as the primary reason overall ( $23 \%$ ). This was cited by $20 \%$
of males and around $24 \%$ of females. Among males, the fear of needles was only found among rural respondents.

|  | Total | Male* |  |  | Female* |  |  | Location* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Rural | Urban | Total | Rural | Urban | Rural | Urban |
| N | 153 | 49 | 39 | 10 | 104 | 64 | 40 | 103 | 50 |
| Reasons for non-motivation for blood donation |  |  |  |  |  |  |  |  |  |
| I am scared of needles. | 22.7 | 20.3 | 24.0 | 0.0 | 24.0 | 32.0 | 10.1 | 28.6 | 8.2 |
| I don't think blood donation is important. | 17.5 | 6.6 | 3.5 | 23.4 | 23.4 | 32.1 | 8.3 | 20.1 | 11.1 |
| I don't know about any places to donate blood. | 13.7 | 11.6 | 13.7 | 0.0 | 14.8 | 18.7 | 7.9 | 16.6 | 6.4 |
| I don't have the time. | 8.4 | 14.4 | 15.5 | 8.2 | 5.2 | 0.0 | 14.3 | 6.5 | 13.2 |
| I might get an infection during transfusion. | 7.6 | 7.6 | 8.9 | 0.0 | 7.7 | 11.2 | 1.5 | 10.3 | 1.2 |
| I don't think I myself would need blood ever so why should I donate for others. | 6.0 | 1.5 | 1.7 | 0.0 | 8.4 | 8.7 | 7.9 | 5.8 | 6.4 |
| I do not want to disclose personal information asked during blood donation. | 5.5 | 13.2 | 15.3 | 1.3 | 1.3 | 2.1 | 0.0 | 7.6 | 0.2 |
| I work during times when the blood bank/camps are open. | 4.1 | 0.0 | 0.0 | 0.0 | 6.4 | 6.3 | 6.5 | 3.6 | 5.3 |
| I have a rare blood type, so they wait for special need. | 1.0 | 2.9 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 0.0 |
| I have a common blood type so they feel that there are many others to donate. | 0.8 | 0.0 | 0.0 | 0.0 | 1.3 | 1.6 | 0.6 | 1.0 | 0.5 |

Note: *Multiple Responses

Around $18 \%$ of the respondents thought that blood donation was not important and another $14 \%$ mentioned that they did not know where to donate blood. Close to $16 \%$ of the respondents in the rural areas and around $6 \%$ in the urban areas mentioned that they did not know of places to go for blood donation. This suggested that apart from creating awareness on the benefits and importance of blood donation (and dispelling fears around it), it is also important to let target audiences know where blood donation could be done. Among the rural respondents, close to $10 \%$ also mentioned that a there was a risk of transmission of infection during transfusion.

## CHAPTER 6

## ATTITUDES TOWARD VBD

The chapter discusses in detail the various attitudinal aspects of blood donation such as norms, perceived severity, barriers, and benefits of blood donation.

## CHAPTER 6

 ATTITUDES TOWARD VBD
### 6.1 BEHAVIORAL ASPECTS OF VOLUNTARY BLOOD DONATION

A growing number of studies have highlighted the role of psychological factors in explaining, predicting, and promoting blood donation behavior. Stigma has been associated with blood donation among the general masses; identifying the attitudinal barriers for blood donation is an important area to explore in addition to demographic aspects.

The study collected the required information through a series of attitudinal statements on a 5-point Likertscale( $1=$ completely disagree, $2=$ disagree, $3=$ neither agree/nordisagree, $4=$ agree, $5=$ completely agree). This chapter discusses in detail the aforementioned aspects.

## The Reliability Test

Before getting into the descriptive and a deeper analysis of the scales, the reliability testing of the statements was done to see it's applicability in regard to the study. Some of the response categories were reverse-coded to make them unidirectional.

The results of the reliability analysis showed that the scale was fairly reliable in measuring the intended behavior of blood donation. With a Cronbach's Alpha of 0.786 , this indicated a fairly high degree of internal consistency for measuring the underlying construct of blood donation among the respondents.

Results from Analysis of Variance confirmed that the results were significant at a 99\% Confidence Interval ( $p<0.01$ ). This grounds the hypothesis that at least one of the population means (statements) was different.

Building upon the above results, Table 6.1 presents a detailed analysis of statements and a detailed picture of the construct of blood donation against all the scale parameters used in the study and measured overall, and by gender and location.

## Understanding Attitudinal Aspects Based on Exposure to Campaign

When the agreement with the attitudinal statements was analyzed among exposed and non-exposed respondents, those exposed to the campaign showed significantly high levels of agreement with the statements depicting positive attitudes toward blood donation (Table 6.2).

| Attitudinal Statements [All Respondents (3148)] | Total |  |  |  | Male |  |  | Female |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Rural | Urban | Total | Rural | Urban | Total | Rural | Urban |
| Social stigma and personal health fears for blood donation |  |  |  |  |  |  |  |  |  |
| In my view women are weak so only men should donate blood. | 54.6 | 51.5 | 61.6 | 62.0 | 60.8 | 64.5 | 46.4 | 41.6 | 58.1 |
| I feel that blood banks have more than enough, so I do not need to donate blood. | 51.7 | 46.6 | 63.4 | 59.1 | 55.0 | 67.8 | 43.6 | 37.7 | 58.0 |
| I fear that I may contract HIV if I donate blood. | 52.7 | 48.4 | 62.6 | 61.8 | 59.6 | 66.6 | 42.5 | 36.4 | 57.7 |
| Some people don't feel comfortable in donating blood because of personal questions being asked. | 41.0 | 37.1 | 50.1 | 47.9 | 43.7 | 56.9 | 33.4 | 30.0 | 41.7 |
| Blood donation may lead to high blood pressure problems for the donor. | 47.9 | 43.3 | 58.6 | 54.9 | 51.6 | 62.0 | 40.2 | 34.5 | 54.3 |
| There are chances that blood donation can lead to sexual dysfunction. | 51.3 | 47.2 | 60.4 | 61.1 | 58.1 | 67.6 | 40.3 | 35.7 | 51.6 |
| Some people do not want to donate blood because they do not trust doctors/medical practitioners. | 40.4 | 36.5 | 49.3 | 43.1 | 38.6 | 52.6 | 37.5 | 34.3 | 45.3 |
| I do not want to donate blood because there is too much wastage of blood in blood banks. | 50.2 | 46.6 | 58.5 | 56.6 | 54.5 | 61.1 | 43.2 | 38.2 | 55.3 |
| There is a risk of infection transmission during blood donation. | 44.8 | 41.5 | 52.5 | 55.7 | 53.0 | 61.4 | 32.7 | 29.1 | 41.5 |
| I feel that I may become blood deficient if I donate blood. | 48.1 | 43.4 | 59 | 56.0 | 53.2 | 61.9 | 39.4 | 32.9 | 55.5 |
| Some people think that if they have a common blood group, they can avoid donating blood because there are many others who can donate instead. | 41.2 | 39.1 | 46.2 | 44.3 | 44.4 | 44.1 | 37.8 | 33.4 | 48.7 |
| I think that blood donation can make me weak or make my health deteriorate. | 42.0 | 37.7 | 51.8 | 51.7 | 49.6 | 56.3 | 31.2 | 25.1 | 46.2 |
| Some people in my community fear that they will lose too much blood if they donate. | 36.7 | 32.1 | 47.4 | 42.5 | 38.1 | 51.8 | 30.4 | 25.6 | 42.0 |
| Self-confidence and social support for blood donation |  |  |  |  |  |  |  |  |  |
| I feel confident that I can safely donate blood. | 25.8 | 27.6 | 21.6 | 23.7 | 25.6 | 19.7 | 28.1 | 29.8 | 23.9 |
| I feel confident that I or my family members would easily get blood for transfusion whenever required. | 31.0 | 31.6 | 29.5 | 32.3 | 33.9 | 28.9 | 29.5 | 29.2 | 30.3 |
| If people knew about safe and licensed blood banks/camps for donating blood, they would surely come forward. | 21.4 | 20.3 | 24.1 | 23.5 | 21.1 | 28.7 | 19.1 | 19.4 | 18.4 |
| I feel confident that my family will support me if I choose to voluntarily donate blood. | 28.5 | 30.7 | 23.4 | 25.0 | 27.5 | 19.7 | 32.3 | 34.1 | 27.9 |
| I feel that blood donation can save lives; everyone should practice it. | 6.8 | 7.7 | 4.6 | 6.5 | 7.7 | 3.8 | 7.2 | 7.8 | 5.7 |
| I encourage others to donate blood regularly. | 17.9 | 19.9 | 13.3 | 18.4 | 20.9 | 13.2 | 17.3 | 18.9 | 13.5 |
| I would feel satisfaction if I donated blood. | 16.6 | 18 | 13.4 | 14.8 | 16.7 | 10.8 | 18.6 | 19.4 | 16.6 |
| Resistance to blood donation |  |  |  |  |  |  |  |  |  |
| I feel that it is safer to have blood transfusion with one's family members/friends for less chance of infection. | 26.1 | 24.4 | 30.0 | 28.5 | 26.3 | 33.2 | 23.4 | 22.4 | 26.1 |
| It is difficult for people to donate blood due to lack of time since it requires a day's rest. | 29.4 | 27.3 | 34.4 | 36.4 | 35.2 | 39.0 | 21.7 | 18.8 | 28.8 |
| I feel that blood donation has become a business these days and has lost its altruistic appeal. | 33.0 | 29.8 | 40.5 | 38.5 | 34.8 | 46.3 | 27.0 | 24.4 | 33.4 |
| Some people would be more willing to donate blood for money rather than voluntarily. | 29.8 | 27.2 | 35.7 | 33.0 | 30.2 | 39.0 | 26.2 | 24.0 | 31.6 |
| Some people who have a rare blood type can wait to donate blood until there is a special need. | 30.3 | 28.6 | 34.3 | 40.8 | 38.5 | 45.8 | 18.6 | 18 | 20.1 |


| Positive Attitudinal Statements - Completely Agree | All (\%) | Exposed (\%) | Not Exposed (\%) |
| :---: | :---: | :---: | :---: |
| Positive Statements |  |  |  |
| I feel confident that I can safely donate blood. | 27 | 44** | 19 |
| I feel that blood donation can save lives; everyone should practice it. | 44 | 62** | 35 |
| I would feel satisfaction if I donated blood. | 33 | 53** | 24 |
| Reasons for not donating |  |  |  |
| If people knew about safe and licensed blood banks/camps for donating blood, they would surely come forward. | 22 | 27 | 20 |
| Some people who have a rare blood type can wait to donate blood until there is a special need. | 15 | 15 | 15 |
| Negative Statements |  |  |  |
| I feel that blood donation has become a business these days and has lost its altruistic appeal. | 18 | 17 | 19 |
| Some people would be more willing to donate blood for money rather than voluntarily donating for altruistic purposes. | 16 | 21 | 14 |
| Misconceptions |  |  |  |
| I fear that I may contract HIV if I donate blood. | 7 | 4 | 9 |
| Blood donation may lead to high blood pressure problem for the donor. | 7 | 4 | 8 |
| I feel that it is safer to have blood transfusion with one's family members/friends since there is less chance of infection. | 23 | 29 | 21 |
| It is difficult for people to donate blood due to lack of time since it requires a day's rest. | 19 | 18 | 20 |
| Base (All Respondents) | 3,148 | 947 | 2,201 |

## Note:

**Significant at 99\% as compared to Not Exposed Group
Test name: z-test of individual proportions

## CHAPTER 7

## BLOOD DONATION PRACTICES

This chapter discusses in detail the practices of blood donation among the sampled respondents. It explores the duration and frequency of blood donation and also looks into the probable reasons for not donating blood.


## CHAPTER 7



## BLOOD DONATION PRACTICES

Blood is scarce. Even with great advances in the field of science, there is still no substitute for blood. There could be no better substitute for matching up the demand and supply gap for blood than promoting VBD. This requires an integrated strategy for blood safety to ensure provision of safe and adequate blood. Regular blood donors are important resources to maintain the blood supply; recruiting them for the purpose is a challenge.

The study attempted to assess the proportion of respondents who ever donated blood and those who were voluntary donors. The cross-sectional analysis spans gender (male and female) and location (rural and urban).

### 7.1 PRACTICE OF BLOOD DONATION

The study asked all the respondents whether they or any of their family members had ever donated blood.

Figure 7.1: Ever Donated Blood—Family or Self (Percentage)


Data analysis suggested that close to $8 \%$ of the respondents had any family members who ever donated blood (Figure 7.1). The proportion was higher in the urban areas than rural, with close to $13 \%$ of respondents in the urban areas and around $5 \%$ in rural areas mentioning that any of their family
members had ever donated blood. State-level data analysis suggested that any family members ever donating blood was the highest in Maharashtra (13\%), followed by Odisha (8\%) and the lowest was reported in Uttar Pradesh (5\%).

It was reported that overall close to $9 \%$ of the respondents had ever donated blood themselves. Geographic analysis suggested that close to $16 \%$ of the respondent sine urban areas and around 5\% in rural areas ever donated blood. At the state level, the proportion of respondents who ever donated blood was the highest in Maharashtra (12\%) whereas the lowest was reported in Odisha (4\%).

Figure 7.2: Ever Donated Blood—Gender and Location (Percentage)


Further analysis revealed that of all males, close to $14 \%$ ever donated blood as compared with only $2 \%$ among the females (Figure 7.2). Among both males and females, those who ever donated blood was higher in urban areas than in rural areas. Of all the rural males, around $10 \%(n=110)$ ever donated blood, as compared to $24 \%(n=112)$ of males in the urban areas. Among females, less than $1 \%$ of rural females and a little higher than $5 \%$ of urban females ever donated blood.

Figure 7.3: Ever Donated Blood—Exposure, Gender, and Location (Percentage)

** Proportions significantly different at 99\% Confidence Interval, p<0.01

Analysis was also done to see the difference in the proportion of those ever donated blood by exposure to the NACO VBD campaign. Data suggested that among all respondents, close to $17 \%$ ( $n=161$ ) of those exposed to the campaign ever donated blood as compared with just $4 \% ~(n=88)$ of the non-exposed respondents. Among males, it was reported that close to $24 \%$ of the males exposed to the VBD campaign ever had donated blood in comparison with $9 \%$ of the non-exposed male respondents. The proportions were lower in the case of female respondents. In the urban areas, around $23 \%$ of the exposed respondents ever donated blood as against $11 \%$ of those who did not see any of the VBD ads.

Figure 7.4: Ever Donated Blood—Gender and Education (All Respondents, Percentage)


Data were analyzed to see the association between education levels and blood donation (Figure 4.4). Overall, close to $0.9 \%$ of the illiterate respondents ( $1.9 \%$ males and $0.4 \%$ females) had ever donated blood. This proportion increased to around $28 \%$ among all respondents ( $37 \%$ males and $13 \%$ females) who were graduates and above. The increase in the proportion of those who ever donated blood was sharper in the case of males than females with increasing levels of education (figure 7.4).

### 7.2 DETAILS OF BLOOD DONATION FOR ALL WHO EVER HAD DONATED BLOOD

Following the above discussion, the study asked all respondents who ever donated blood for further details and about their practice of blood donation in general.

Table 7.1 below presents the details of blood donation practices for all respondents who ever donated blood ( $\mathrm{N}=267$ ). Of these, when donating blood for the first time, a $66 \%$ donated voluntarily. This proportion increased slightly to $67 \%$ for the last time they donated blood. VBD was similar (66\%) among both males ( $n=237$ ) and females ( $n=30$ ).

Analysis by location revealed that VBD was higher among respondents in urban areas than in rural areas. Close to $47 \%$ of the respondents in the rural areas donated blood voluntarily for the first time, which was as high as $80 \%$ of urban respondents.

Analysis at the state level revealed that VBD was the highest in Maharashtra ( $n=74$ ) at $98 \%$ of those who had ever donated blood and the lowest in Assam ( $22 \%, n=50$ ) and Uttar Pradesh ( $27 \%, n=40$ ) (Table 7.2).

Further examination revealed that most of the respondents (51\%) gave blood only once. Approximately $36 \%$ gave blood $2-3$ times ever. Most respondents (69\%) had given blood more than a year ago. Most of those who donated blood did so in either blood camps (35\%) or in the government hospitals (38\%). The results were reported to be similar across the differentials of gender and location (Table 7.1). At the state level, around $74 \%$ of the respondents in Assam ( $\mathrm{n}=50$ ) donated blood in government hospitals, while $86 \%$ in Maharashtra ( $n=74$ ) donated blood in camps. The state of Uttar Pradesh ( $n=40$ ) reported the highest proportion of respondents (33\%) donating blood in private hospitals. Only 4\% of the respondents in the aggregate reported to have any complication during blood donation.

Table 7.1: Details of Blood Donation by Location, Gender, and Exposure

|  | Total |  |  | Urban |  |  | Rural |  |  | Exposure |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\stackrel{\overline{\widetilde{0}}}{\stackrel{0}{0}}$ | $\frac{\frac{0}{0}}{\sum \sum}$ |  | $\begin{aligned} & \overline{\widetilde{0}} \\ & \stackrel{0}{0} \end{aligned}$ | $\frac{0}{\frac{0}{0}}$ | $\frac{\frac{0}{0}}{\frac{c}{0}}$ | $\begin{aligned} & \stackrel{\Gamma}{0} \\ & \stackrel{0}{0} \end{aligned}$ | $\frac{0}{\frac{1}{N}}$ | $\frac{\frac{\alpha}{\sigma}}{\frac{\pi}{む}}$ |  |  | $\begin{aligned} & \overline{0} \\ & \stackrel{\rightharpoonup}{0} \end{aligned}$ |
| N | 267 | 237 | 30 | 152 | 129 | $23 t$ | 115 | 108 | $7 t$ | 174 | 93 |  |
| Type of blood donation, first time |  |  |  |  |  |  |  |  |  |  |  |  |
| Voluntary | 65.7 | 65.6 | 66.0 | 79.6 | 82.1 | 65.6 | 47.3 | 46.0 | 67.5 | 61.6 | 73.3 | * |
| Replacement | 30.0 | 32.1 | 12.6 | 16.2 | 17.9 | 6.6 | 48.1 | 49.1 | 32.5 | 33.6 | 23.3 | ** |
| Professional | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - |
| Don't know | 4.4 | 2.2 | 21.3 | 4.2 | 0.0 | 27.8 | 4.6 | 4.8 | 0.0 | 4.9 | 3.4 | - |


| Type of blood donation, did last time |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Voluntary | $\mathbf{6 7 . 2}$ | 67.3 | 66.4 | $\mathbf{7 9 . 8}$ | 82.3 | 65.6 | $\mathbf{5 0 . 7}$ | 49.6 | 69.1 | 64.5 | $\mathbf{7 2 . 3}$ | - |
| Replacement | $\mathbf{2 7 . 9}$ | 30.4 | 7.7 | $\mathbf{1 6 . 0}$ | 17.7 | 6.6 | $\mathbf{4 3 . 5}$ | 45.6 | 11.4 | 29.9 | 24.2 | - |
| Professional | $\mathbf{0 . 0}$ | 0.0 | 0.0 | $\mathbf{0 . 0}$ | 0.0 | 0.0 | $\mathbf{0 . 0}$ | 0.0 | 0.0 | 0.0 | 0.0 | - |
| Don't know | $\mathbf{4 . 9}$ | 2.2 | 25.9 | $\mathbf{4 . 2}$ | 0.0 | 27.8 | $\mathbf{5 . 7}$ | 4.8 | 19.5 | 5.6 | 3.4 | - |

Number of times blood donated till now

| Once | $\mathbf{5 0 . 6}$ | 52.2 | 37.5 | $\mathbf{4 9 . 2}$ | 53.0 | 27.9 | $\mathbf{5 2 . 4}$ | 51.3 | 69.0 | 46.4 | 58.4 | - |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2-3 times | $\mathbf{3 5 . 6}$ | 35.6 | 35.7 | $\mathbf{3 5 . 4}$ | 33.9 | 43.5 | $\mathbf{3 5 . 9}$ | 37.6 | 9.9 | 37.4 | 32.3 | - |
| 4-5 times | $\mathbf{4 . 9}$ | 4.9 | 4.9 | $\mathbf{3 . 2}$ | 3.8 | 0.0 | $\mathbf{7 . 0}$ | 6.1 | 21.1 | 7.2 | 0.5 | * |
| 6-7 times | $\mathbf{3 . 8}$ | 4.2 | 0.6 | $\mathbf{4 . 2}$ | 4.9 | 0.8 | $\mathbf{3 . 2}$ | 3.4 | 0.0 | 4.7 | 2.2 | - |
| 8-9 times | $\mathbf{0 . 8}$ | 0.9 | 0.0 | $\mathbf{0 . 4}$ | 0.5 | 0.0 | $\mathbf{1 . 2}$ | 1.3 | 0.0 | 0.0 | 2.2 | - |
| More than 10 time | $\mathbf{1 . 7}$ | 1.9 | 0.0 | $\mathbf{2 . 8}$ | 3.3 | 0.0 | $\mathbf{0 . 2}$ | 0.3 | 0.0 | 2.6 | 0 | - |


| Duration since last time donated blood |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1-2 months ago | $\mathbf{2 . 5}$ | 1.2 | 13.3 | $\mathbf{3 . 0}$ | 0.4 | 17.3 | $\mathbf{2 . 0}$ | 2.1 | 0.0 | 3.1 | 1.4 | - |
| 3-4 months ago | $\mathbf{6 . 4}$ | 7.1 | 0.2 | $\mathbf{1 1 . 2}$ | 13.1 | 0.3 | $\mathbf{0 . 0}$ | 0.0 | 0.0 | 4.1 | 10.6 | $*$ |
| 5-6 months ago | $\mathbf{5 . 2}$ | 5.2 | 4.9 | $\mathbf{4 . 0}$ | 4.8 | 0.0 | $\mathbf{6 . 7}$ | 5.8 | 21.1 | 5.0 | 5.6 | - |
| 7-8 months ago | $\mathbf{0 . 8}$ | 0.9 | 0.0 | $\mathbf{0 . 6}$ | 0.7 | 0.0 | $\mathbf{1 . 1}$ | 1.2 | 0.0 | 0.5 | 1.4 | - |
| 9-10 months ago | $\mathbf{1 . 8}$ | 2.0 | 0.0 | $\mathbf{2 . 7}$ | 3.2 | 0.0 | $\mathbf{0 . 6}$ | 0.7 | 0.0 | 2.4 | 0.7 | - |
| 11-12 months ago | $\mathbf{7 . 6}$ | 8.2 | 3.1 | $\mathbf{1 2 . 0}$ | 13.9 | 1.1 | $\mathbf{1 . 9}$ | 1.4 | 9.9 | 7.8 | 7.3 | - |
| More than a year | $\mathbf{6 9 . 0}$ | 71.2 | 51.6 | $\mathbf{5 6 . 9}$ | 58.8 | 46.4 | $\mathbf{8 4 . 9}$ | 86.0 | 69.0 | 70.6 | 66.2 | - |


| Place where donated blood last time |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Blood banks | $\mathbf{7 . 0}$ | 6.7 | 9.4 | $\mathbf{7 . 0}$ | 6.3 | 11.1 | $\mathbf{7 . 1}$ | $\mathbf{7 . 3}$ | 3.5 | 6.5 | 8.1 | - |
| Blood camps | $\mathbf{3 4 . 9}$ | 34.1 | 41.8 | $\mathbf{4 5 . 0}$ | 47.0 | 34.2 | $\mathbf{2 1 . 6}$ | 18.7 | 66.6 | 34.8 | 35.2 | - |
| Govt. hospital | $\mathbf{3 8 . 0}$ | 41.2 | 12.7 | $\mathbf{2 6 . 4}$ | 29.8 | 7.4 | $\mathbf{5 3 . 4}$ | 54.9 | 29.9 | 40.5 | 33.5 | - |
| Private hospital | $\mathbf{1 5 . 4}$ | 15.5 | 14.9 | $\mathbf{1 5 . 4}$ | 14.7 | 19.4 | $\mathbf{1 5 . 5}$ | 16.4 | 0.0 | 14.8 | 16.6 | - |


| Any complication when last donated blood |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Yes | $\mathbf{3 . 5}$ | 4.0 | 0.0 | $\mathbf{2 . 0}$ | 2.3 | 0.0 | $\mathbf{5 . 6}$ | 5.9 | 0.0 | 3.6 | 3.4 | - |
| No | $\mathbf{9 6 . 5}$ | 96.0 | 100.0 | $\mathbf{9 8 . 0}$ | 97.7 | 100.0 | $\mathbf{9 4 . 4}$ | 94.1 | 100.0 | 96.4 | 96.6 | - |

Age when first donated blood

| Mean Age | $\mathbf{3 0 . 3}$ | 30.1 | 32.1 | $\mathbf{3 0 . 0}$ | 29.6 | 34.0 | $\mathbf{3 0 . 6}$ | 30.7 | 28.1 | 29.6 | 31.5 | - |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| S.D. | $\mathbf{7 . 9}$ | 7.9 | 8.4 | $\mathbf{8 . 4}$ | 8.2 | 8.9 | $\mathbf{7 . 3}$ | 7.4 | 6.1 | 7.3 | 8.8 | - |

[^1]Table 7.2: Details of Blood Donation by State

|  | Total | State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Assam | Maharashtra | Odisha | Tamil Nadu | Uttar Pradesh |
| N | 267 | 50 | 74 | $29 t$ | 74 | 40 |
| Type of blood donation, first time |  |  |  |  |  |  |
| Voluntary | 65.7 | 21.9 | 97.9 | 90.6 | 74.6 | 26.8 |
| Replacement | 30.0 | 67.7 | 2.1 | 9.4 | 16.8 | 73.2 |
| Professional | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Don't know | 4.4 | 10.4 | 0.0 | 0.0 | 8.6 | 0.0 |
| Type of blood donation, last time |  |  |  |  |  |  |
| Voluntary | 67.2 | 32.5 | 96.8 | 90.6 | 74.1 | 26.8 |
| Replacement | 27.9 | 57.1 | 3.2 | 9.4 | 15.5 | 73.2 |
| Professional | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Don't know | 4.9 | 10.4 | 0.0 | 0.0 | 10.4 | 0.0 |
| Number of times blood donated till now |  |  |  |  |  |  |
| Once | 50.6 | 41.8 | 44.8 | 47.6 | 49.5 | 76.6 |
| 2-3 times | 35.6 | 40.1 | 48.7 | 36.9 | 30.3 | 14.5 |
| 4-5 times | 4.9 | 10.5 | 0.4 | 13.2 | 4.4 | 0.7 |
| 6-7 times | 3.8 | 5.9 | 1.3 | 2.3 | 7.2 | 0.5 |
| 8-9 times | 0.8 | 0.0 | 2.8 | 0.0 | 0.0 | 0.0 |
| More than 10 time | 1.7 | 0.5 | 1.6 | 0.0 | 0.0 | 7.7 |
| Duration since last time donated blood |  |  |  |  |  |  |
| 1-2 months ago | 2.5 | 2.9 | 0.0 | 2.0 | 1.1 | 10.0 |
| 3-4 months ago | 6.4 | 0.0 | 22.6 | 0.0 | 0.4 | 0.0 |
| 5-6 months ago | 5.2 | 10.4 | 7.9 | 0.0 | 3.3 | 0.7 |
| 7-8 months ago | 0.8 | 0.0 | 1.2 | 4.4 | 0.0 | 0.0 |
| 9-10 months ago | 1.8 | 0.0 | 5.6 | 2.3 | 0.0 | 0.0 |
| 11-12 months ago | 7.6 | 0.9 | 14.5 | 2.4 | 9.6 | 3.7 |
| More than a year | 69.0 | 80.7 | 43.7 | 89.0 | 69.6 | 85.6 |
| Place where donated blood last time |  |  |  |  |  |  |
| Blood banks | 7.0 | 0.0 | 3.0 | 6.1 | 8.0 | 22.3 |
| Blood camps | 34.9 | 7.6 | 85.9 | 42.3 | 14.7 | 7.5 |
| Govt. hospital | 38.0 | 74.2 | 4.1 | 43.6 | 45.2 | 37.5 |
| Private hospital | 15.4 | 18.2 | 3.9 | 3.0 | 20.6 | 32.7 |
| Any complication when last donated blood |  |  |  |  |  |  |
| Yes | 3.5 | 0.0 | 0.9 | 10.3 | 3.6 | 7.8 |
| No | 96.5 | 100.0 | 99.1 | 89.7 | 96.4 | 92.2 |
| Age when first donated blood |  |  |  |  |  |  |
| Mean Age | 30.3 | 31.8 | 28.7 | 34.6 | 28.8 | 31.1 |
| S.D. | 7.9 | 4.9 | 8.4 | 10.4 | 6.6 | 9.3 |

Note: † Small Base, SD: Standard Deviation

### 7.3 INTENTION TO DONATE BLOOD IN FUTURE

All the respondents in the study were asked whether they had a plan to donate blood in the future. Table 7.3 presents the details of the intent to donate blood.

| Table 7.3: Intention to Donate Blood in Future |  |  |
| :---: | :---: | :---: |
|  | N | Percentage |
| Total |  |  |
| Total | 3,148 | 40.2 |
| Male | 1,565 | 51.1 |
| Female | 1,583 | 28.0 |
| Urban |  |  |
| Total | 958 | 46.7 |
| Male | 465 | 60.2 |
| Female | 493 | 30.2 |
| Rural |  |  |
| Total | 2,190 | 37.3 |
| Male | 1,100 | 46.8 |
| Female | 1,090 | 27.1 |
| State |  |  |
| Assam | 649 | 52.7 |
| Maharashtra | 600 | 54.8 |
| Odisha | 659 | 42.7 |
| Tamil Nadu | 621 | 29.7 |
| Uttar Pradesh | 619 | 20.5 |
| Exposure |  |  |
| Exposed | 947 | 67.2 |
| Non-Exposed | 2,201 | 27.2 |

Analysis of the data revealed that around 40\% ( $n=1259$ ) of all respondents had plans to donate blood in future. At the differential of gender, around $51 \%$ ( $n=798$ )_of all males and $28 \%(n=443)$ of all females had plans to donate blood in future. More respondents in the urban areas (67\%) as compared with rural areas (47\%) reported that they will donate blood in future. The differential in the intent to donate blood among females was less across locations than males. Close to $60 \%$ of males in the urban areas intended to donate blood in future as compared with $47 \%$ in the rural areas.

Analysis at the state level reported that the intent to donate blood was highest among the respondents in Maharashtra (55\%, n=330) and Assam (53\%, n=344), then followed by Odisha (43\%, n=283), Tamil Nadu ( $30 \%, \mathrm{n}=186$ ) and the lowest was reported among the respondents in Uttar Pradesh ( $21 \%$, $\mathrm{n}=130$ ).

Analysis of the data for plan to donate blood in future by exposure to the VBD campaign by NACO revealed the fact that $27 \%$ of the non-exposed respondents had plans to donate blood in future. This proportion increased to as high as 67\% among the exposed respondents. A significant difference was found among the proportion of respondents having a plan to donate blood in future between exposed and non-exposed respondents (at $99 \% \mathrm{Cl}, \mathrm{p}<0.01$, t -test for difference in proportions).

When probed for the reasons for not having a plan to donate blood in the future, most respondents (37\%) reported that "I am sick/unhealthy, so I cannot donate blood" or that"I feel that I would get weak/ sick if I donate blood."

## CONCLUSION

NACO used mass media and other modes of communication to disseminate information about VBD to the masses. The delivery of messages related to blood donation through mass media was also intended to ensure that messages reached those without direct access to the media sources, through social discussion.

Mass media sources such as TV, radio, and mobile were identified as communication channels with which to disseminate information and shift attitudes around blood donation. It was hypothesized that those who were exposed to messages related to blood donation through mass media would have more favorable intentions toward blood donation and will be willing to go for VBD and have more positive attitudes.

The study evaluated one such mass media campaign that NACO implemented for disseminating information and knowledge on VBD. The study explored the reach and recall of VBD messages delivered through media sources (TV and radio) and also aimed to assess the difference in intended behavior for VBD and attitudes with those exposed to the campaign as compared with those not exposed.

The findings from the study suggested that those who were exposed to the VBD ads had increased intention to act and more favorable attitudes toward VBD than those who were not exposed to the campaign.

The findings of this study support the hypothesis that those who were exposed to the VBD media campaign had greater positive attitudes toward VBD than the non-exposed group. This could be due to other environmental factors as well and as a result of associations with NACO's VBD media campaign. The data do suggest the positive association of the campaign with increased favorable behavioral attributes leading toward VBD.

The study presented a picture of current knowledge of VBD and intention to act for blood donation among both the respondents-those who were exposed to the media campaign and those who were not exposed. Intention to act for blood donation versus the practice of actually donating blood was found to be higher among all exposed to the current campaign messages. By the virtue of the design of the study, the results could only be suggestive of a positive impact of the campaign, but were not conclusive. Still, the study findings do suggest that exposure to the VBD campaign, when taken with other environmental factors, has led to better uptake of blood donation messages.

## Contact Information

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[^0]:    1 Wakefield, Melanie A., Barbara Loken, and Robert C Hornik.2010. Use of mass media campaigns to change health behavior. The Lancet 376 (9748):1261-1271

[^1]:    Note:
    ** Significant at $99 \mathrm{Cl}(\mathrm{p}<0.01)$, * significant at $95 \% \mathrm{Cl}(\mathrm{p}<0.05)$, SD: Standard Diviation
    P -val is based on t -test for proportions
    t: Small Base

