OXFAM IN ACTION

Improving Maternal Health in Six States of India

Annual Survey - 2014

ऑक्सफैम इंडिया
OXFAM
India

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KEY OBJECTIVES OF THE PROJECT

- GREATER AWARENESS, DEMAND, USE OF MATERNAL HEALTH SERVICES AND GREATER SHARE OF FOOD, NUTRITION AND CARE FOR PREGNANT WOMEN AND LACTATING MOTHERS.
- BETTER OBSTETRIC CARE FOR WOMEN
- INCREASED ACCESS TO NUTRITIONAL PROGRAMS
- INCREASED ACCESS TO SAFE ABORTION SERVICES AND REPORTING OF THE SAME INSTITUTIONALLY
- MORE ACCOUNTABLE HEALTH SYSTEM STARTING FROM OUTREACH TO STATE LEVELS.

INTRODUCTION

'Accountable and Universal Basic Health Services' is one of the envisioned programming areas under Oxfam India's (OIN) strategy 2010-15. Oxfam India initiated the project 'Improving Maternal Health', towards fulfilling its commitment to provide 'right to life with dignity for all'. Through this project, OIN attempts to bring long term changes in community perception regarding women's reproductive health and enhance women's access to essential maternal health services in six states of India- Rajasthan, Bihar, Jharkhand, Chhattisgarh, Odisha and Maharashtra.

The project aims to improve access to complete package of maternal healthcare through social determinant approach. It intends to work at multiple levels on women's access to intra household nutrition, healthcare awareness, demand generation for health services, empowerment of women and delayed marriage; building community capacity for planning and demanding accountability of health services with specific emphasis on women's health services.

The project contributes to the Millennium Development Goal (MDG) 1-*'eradicating extreme poverty and hunger'*, and MDG 5- *'reducing the maternal mortality'*. It also intends to leverage the government programmes on health, child development, and food security[1].

OBJECTIVE, METHODOLOGY AND COVERAGE OF THE ANNUAL SURVEY

The objective of the annual survey was to assess the progress made till mid-2014 by measuring the tangible milestones that the project envisaged to achieve. The progress of the project was assessed on the basis of the key indicators as defined in the project logframe and compared with the baseline conducted in 2012. Through the survey, household (HH) level knowledge, behavior and practices on these indicators were also assessed.

Keeping in mind the broad evaluation goal of the project, a mixed research design was adopted including the quantitative survey, and qualitative interviews. The quantitative survey tool was an adaptation of the baseline

[1] Such as NRHM (National Rural Health Mission), ICDS (Integrated Child Development Services), PDS (Public Distribution System) etc.

tool to allow comparison while qualitative tools were used to triangulate the quantitative findings. Qualitative tools were designed to capture the current level of knowledge attitude practice (KAP) and the process adopted at community level for improved maternal health.

The survey was carried out in 14 districts across six project states. In order to get a sample size required for providing a reliable estimate of the variable under consideration at a reasonable level of precision, a prevalence of 50 percent (p) was used in determining the sample size. Moreover, 5 percent margin of error (e), 95 percent confidence level (z=1.96) and a non-response rate of 10 percent were used in estimating the sample size. As the sampling technique will be multi stage, therefore, design effect (*deff*) of 1.5 was assumed

Sample size (n)=*deffz(p*q)/d =1.5*96=144**

Taking into account the non-response rate of 10 percent, the overall sample size was adjusted to (144 +14) i.e. approximately 160 respondents at for each district, bringing the total target sample to 960 households. The sample selection followed four steps, as described below

- **Stage1:** Two blocks were randomly selected from each district on the basis of tribal and rural representation. Where only one block is being covered under the program, it is automiatically part of sample.
- **Stage 2:** Selection of two Health sub-centres by PPS method from each block
- **Stage 3:** Two villages selected under each health centre (one nearest to and the other farthest from the selected health sub-centre). Village served as primary sampling unit (PSU)
- **Stage 4:** Household (HH) listing exercise in selected PSU done; further HH were divided into two categories - below the poverty line (BPL) and above the poverty line (APL). 10 HHs with eligible women selected by systematic sampling method from each category. Eligible women included pregnant women and mothers with children below 2 years.

Other respondents, primarily covered through qualitative data collection methods are-Auxiliary Nurse and Midwives (ANMs), Angan Wadi Workers (AWWs), Accredited Social Health Activist (ASHA), Child Development Programme Officer (CDPO) and Block Medical Officer (BMO). At the community level Village Health and Sanitation Committee (VHSC) members were also interviewed.

HH listing was done using Android based mobile applications in the selected PSUs. Data collection was done using the programme designed on CSPro software for the main tool for mothers and pregnant women. For the remaining tools, i.e., semi structured questionnaires with ANMs, ASHAs, AWWs and VHSC, focus group discussions (FGDs) with pregnant mothers, mothers of children between 0-2 years of age and husbands of such women were conducted using the traditional paper and pen method on printed copies. The coverage of the survey is presented in table 1. Out of the 2,405 women covered under the annual survey, 1,261 (61 percent were mothers) while others were pregnant women.

TABLE 1: ANNUAL SURVEY: SAMPLE COVERED

Target Respondent and Tool used	Sample planned	Sample achieved
Mothers/Pregnant women-quantitative survey format	2,240	2,045 (1,267 BPL and 778 APL)
VHSC-Semi structured interview	51	70
ASHA- Semi structured interview	51	68
ANM- Semi structured interview	51	46
AWW- Semi structured interview	51	74
CDPO-In-depth interview	19	15
BMO- In-depth interview	19	19
Pregnant women-FGD	14	14
Mothers-FGD	14	14
Husbands-FGD	14	14

KEY FINDINGS

Respondents' age and education levels: About 83 percent of the women respondents in the study states were under 30 years of age with 43 percent in the age group of 20-24 years and 36 percent in the age group of 25-29 years. Proportion of women in lower age group (i.e. 15-19 years) was the highest in Rajasthan at seven percent, followed by Jharkhand and Chhattisgarh (about five percent). Odisha had less than one percent women in age group 15-19 yrs.

Nearly half of the women under survey are literate/educated. Compared to this, 68 per cent of the men (husbands of respondents) were literate/educated. Among the six states, Odisha has the highest proportion of literate/educated women (74 percent), followed by Jharkhand (64 per cent) and Chhattisgarh (51 per cent). Bihar recorded the lowest proportion of literate/educated women (35 percent).

Nearly 25 percent of all women, however, have studied upto 6th grade or below and only eight percent were educated upto grade 10th or above. The literacy rate was found to be higher in APL families (55 percent) as compared to BPL families (48 percent).

Awareness on legal age at marriage: 38 percent of women were aware about the legal age of marriage of boys i.e. 21 years while 45 percent of women were aware about the legal age of marriage for girls i.e. 18 years. The awareness levels on this count did not differ significantly between APL and BPL families. FGDs show that most of the women were well informed about the legal age of marriage and the disadvantages of early marriage.

Number of women conceiving at least one year after the legal age of marriage: About 80 per cent women reported having conceived after at least one year of the legal age of marriage (i.e. at 19 years or above). Among the six states, Odisha reported the highest proportion of women conceiving one year after legal age of marriage (91 percent), followed by Jharkhand (89 percent). Both Bihar and Chhattisgarh reported 75 per cent of women conceiving at least one year after the legal age of marriage while Rajasthan reported 71 per cent on this indicator.

Number of women able to articulate different disadvantages of early marriages: Nearly 50 percent women respondents were able to articulate at least one disadvantage of early marriage, a significant improvement has been seen from the baseline (only five percent). In Odisha and Jharkhand, nearly three fifths of the women could articulate at least one disadvantage of early marriage. However, this proportion was very low in Rajasthan and Maharashtra (31 percent and 40 percent respectively).

Number of women consuming iron rich/iron fortified food: About 20 percent of the women under the survey consume iron-fortified food on a daily basis while they also take food from AWC. This was an increase from the baseline figure of five percent.

From qualitative discussions, it emerged that while all mothers were aware and believe that a pregnant women should get a balanced and nutritious diet, many families found it difficult to provide such food due to economic reasons.

"WE EAT VEGETABLES AND CHAPATIS DAILY BUT WE ARE NOT ABLE TO TAKE MEAT, FISH AND EGGS BECAUSE OF OUR POOR FINANCIAL STATUS SO WE MANAGE TO EAT WHAT IS COOKED FOR EVERYONE ELSE."

Mother 0-2, Village Mahishmara, Block Podhis, Kishanganj, Bihar.

Awareness and choice of Health Facility: Most respondents (83 percent) were aware of Primary Health Centre (PHCs), followed by 75 percent who knew about the sub center. Approximately 70 percent of respondents were aware about the District Hospital.

PHCs (56.6 per cent) and private clinics (31.4 per cent) were the most preferred health facilities by respondents across all states. Very few respondents (2 percent) chose Registered Medical Practitioners (RMP) as their choice of health facility/worker. Also, 27 percent of APL families prefer District Hospital as compared to 16 percent of BPL families.

Awareness of Danger Signs during Pregnancy: Swelling of hands/face (75 percent), pelvic or abdominal pain (73 percent), and vaginal bleeding (60 percent) are the most common danger signs during pregnancy known to respondents. The village level health workers also corroborated these as being commonly reported by pregnant women facing complications. Awareness on these danger signs was the highest in Odisha. Awareness level on different danger signs was 8-15 percentage point higher among APL families.

Recognition of regular contractions prior to 37 weeks, and no fetal movement as danger signs was comparatively low (39 percent and 44 percent respectively).

Antenatal care (ANC) visits: Almost three fifth of the respondents (62 percent of eligible respondents) have had two or more ante- natal visits. The proportion of women reporting three or more antenatal check-ups is relatively lower in Rajasthan, Jharkhand (14 percent each) and Bihar (16 percent), indicating the need to improve awareness and behaviour change in this regard.

"MATERNAL HEALTHCARE IS IMPORTANT FOR WOMEN DURING AND AFTER PREGNANCY. DURING PREGNANCY, STARTING FROM THE 3rd MONTH, SHE (PREGNANT WOMAN) SHOULD GO FOR AT LEAST THREE ANTENATAL CHECKUPS SO THAT SHE CAN GET TO KNOW ABOUT HER OWN AND HER BABY'S HEALTH. THESE CHECKUPS SHOULD HAPPEN AT THE 3rd, 6th AND 9th MONTH."

- Mother 0-2, Temli village, Korchi block, Gadchiroli, Maharashtra

Visits by healthcare providers: The percentage of women acknowledging visits by ANM and AWW was 38 percent and 47 percent respectively. The frequency of visits of ASHA was reported by 66 percent respondents compared to 52 percent during the baseline survey. Visits by healthcare providers is the highest in Odisha at 76 percent for ANMs, 95 percent for ASHAs and 93 percent for AWWs while it is comparatively low in Bihar and Rajasthan. For instance, only a quarter of respondents in these states were visited by the ANM and only about half by ASHA.

A substantial number of respondents (86 percent) reported that they met healthcare providers, primarily ASHA (86 percent) and ANM (83 percent) in the last month of their pregnancy.

Number of women who received counseling from ANM on care during pregnancy: 38 percent of the women acknowledged that they received all the three health care advices i.e. "to increase the amount of food you eat", "to rest more" and "to work less" from ANM. The baseline figure for this indicator was 37 percent. Inter-state variation was, however, very significant on this indicator-Odisha (86 percent), Maharashtra (50 percent), Chhattisgarh (41 percent), Rajasthan (29 percent), Jharkhand (27 percent) and Bihar (14 percent).

Awareness of Complications during Delivery: Premature labor is the most common delivery complication women (76 percent) are aware of. Besides that, excessive bleeding and prolonged labor were known to 69 percent and 66 percent respondents respectively. Complications like obstructed labour, breech presentation and hypertension were known to a little less than 50 percent of the respondents under the study.

"A PREGNANT WOMAN SHOULD DELIVER HER BABY IN THE HOSPITAL. ASHA, ANM AND MITANIN INFORM US ABOUT THIS. THE MOTHER AND THE BABY REMAIN HEALTHY AND CAN ALSO ENJOY BENEFITS FROM DIFFERENT SCHEME."

-Husband, Ama-Tikra village,
Podi block, Korba district, Chhattisgarh

Place of Delivery: Approximately 75 percent of the 1,261 women who had given birth in the past two years went for institutional delivery. PHC is the most preferred delivery institution with 43 percent of the respondents choosing it for delivery. 24 percent of the respondents opted for delivery at home in comparison to 32 percent recorded during the baseline. State level data shows that 42 percent of women went for institutional delivery in district hospitals in Rajasthan. Cases of delivery at home are almost double in BPL families (29 percent) as compared to those in APL families (16 percent).

In terms of relation between place of pregnancy-registration and institutional delivery, the data shows that out of all pregnancies registered with AWW, approximately 74 percent of the deliveries were conducted in government facilities. Further, more that 31 percent of deliveries conducted at home were for cases in which the pregnancy was not registered indicating a strong positive correlation between pregnancy registration and institutional delivery.

Number of births attended by skilled health personnel: Birth attended by skilled health personnels like doctors and ANM increased to

73 percent against the baseline figure of 45 percent. Jharkhand, Odisha and Rajasthan noted high proportions of birth attended by skill health personnel (95 percent, 90 percent and 86 percent respectively); whereas Chhattisgarh lagged at 42 percent. This proportion was 67 percent for Bihar and 70 per cent for Maharashtra.

Awareness of Post Delivery Complications: Among various symptoms of post delivery complications, excessive bleeding, abdominal pain and high fever were most known (71 percent, 67 percent and 65 percent respectively). Recognition of symptoms was relatively low for eclampsia (45 percent), hypertension (46 percent) and sepsis (30 percent) indicating that awareness about symptoms of these complications needs to be improved in the project areas.

Number of women aware about incidences of serious health problems related to pregnancy and child birth: This indicator was measured on the basis of responses on women's awareness levels on at least two danger signs during pregnancy, during delivery and post delivery. Overall (44 percent) of women were aware about the serious health problems related to pregnancy and child-birth in comparison to the baseline (30 percent). This proportion was the lowest for Chhattisgarh (34 percent) and highest for Jharkhand (60 percent). Interstate variation on this indicator was not significant amongst the other four states where 42-44 percent women were aware about incidences of serious health problems related to pregnancy and child birth.

Number of women with incidences of serious health problems related to child-birth: Incidences of serious health problems related to child-birth was reported by about 44 percent women compared to the baseline of about 30 percent. This increase may be due to increase in the awareness level of the post-delivery complications, which was found to be considerably higher than the baseline levels. Highest proportion of women facing serious problems relating child-birth was reported from Rajasthan (66 percent), followed by Maharashtra (60 percent), whereas the lowest proportion of such incidences was reported from Jharkhand and Bihar (29 percent each). In Odisha, 42 per cent women reported facing serious health problems related to child-birth.

Breast Feeding practices: Overall, 79 percent women reported that they first breast- fed their child within one hour of birth while 14 percent women breast-fed their child within six hours of birth.

"HERE NO ONE OPTS FOR ABORTION. IF THE BLEEDING STARTS BY ITSELF, THE WOMAN GOES TO THE PRIVATE FACILITY AS THEY RECEIVE GOOD CARE. AT THE GOVERNMENT FACILITY, WE HAVE TO BUY MEDICINES AND WE ARE NOT GIVEN PROPER CARE."

Mother 0-2, Dhanushi village, Rani Saidpur block, Sitamarhi, Bihar

"WE INFORM THE WOMEN THAT IT COULD BE FATAL IF THEY DO NOT ACCESS SAFE ABORTION FACILITY. HENCE WE RECOMMENDED THEM TO GO FOR SAFE ABORTION FACILITY WHICH ARE AVAILABLE AT GOVERNMENT HEALTH FACILITIES"

ANM, Chittorgarh Block, Chittorgarh, Rajasthan

92 percent of all respondents reported feeding colostrum to the new born while 99 percent reported exclusively breastfeeding for at least six-months. However, about 21 percent women also reported exclusive breastfeeding for more than six months, a practice that needs to be changed.

Number of women having access to safe abortion facility: About 18 percent women reported having access to safe abortion facility. This proportion is low in general but much higher than the baseline figures of 1.6 percent. Jharkhand had the highest proportion of women having access to safe abortion facilities (33 percent) while Rajasthan had the lowest (4 percent).

Number of women aware about availability of abortion services at various levels of public health system: Overall 15 percent women were aware about abortion services at public health facilities. This figure was 14 percent during baseline study. Awareness level was the lowest in Rajasthan (4 percent) while other states did not show much variation on this indicator.

Number of eligible couples in the intervention area having knowledge of temporary method: 89 percent women were aware of temporary methods of contraception (male condoms, withdrawal methods, IUD, oral pills, emergency pills, cycle beads and rhythm methods), a significant improvement over the baseline figure of 57 percent. Rajasthan and Bihar had the lowest awareness levels in this regard (84 percent) while highest awareness levels were recorded in Chhattisgarh (95 percent).

About 30 percent women who had ever used a contraception method noted female sterilization as the method adopted

"AFTER HAVING TWO CHILDREN, THE MALE OR FEMALE SHOULD GO FOR STERILIZATION. WE CAN CONTROL THE SIZE OF OUR FAMILIES BY THIS AND CAN GIVE GOOD EDUCATION TO OUR CHILDREN."

Husband, Kale village, Korchi Block, Gadchiroli, Maharashtra

while only one percent respondents reported male sterilization. Female sterilization as the method used for family planning was as high as 47 percent in Rajasthan and Odisha and was the lowest in Bihar (18 percent) and Jharkhand (20 percent).

Number of women having access to contraceptives: Nearly 38 percent respondents reported having access to contraceptives in their locality, which was 21 percent at the time of baseline survey. Among the six states under survey, access to contraceptives was the best in Maharashtra (60 percent), followed by Rajasthan (44 percent) and Chhattisgarh (39 percent). Only 23 percent women in Bihar and 30 percent in Jharkhand reported having access to contraception in their locality.

Number of women aware about availability of contraceptives at various levels of the public health system: Overall 41 percent women were aware about the availability of contraceptives at various public health systems like the sub-center, CHC, government hospital and other public places. Awareness levels on this indicator comparatively much lower (14 percent) at the time of baseline survey. Awareness levels was highest in Odisha (56 percent), followed by Maharashtra (44 percent) and Bihar (41 percent) while it was the lowest in Rajasthan (29 percent).

Number of women who benefited under the Janani Surksha Yojana (JSY) scheme: Overall two-thirds (62 percent) of eligible respondents confirmed receiving benefits under JSY, an increased of 12 percentage points over baseline. Interstate variation was significant on this indicator with Odisha recording highest access (80 percent), followed by Rajasthan (76 percent). Lowest access was noted in Chhattisgarh (34 percent).

Awareness of Village Health and Nutrition Day (VHND): Overall 58 percent of the respondent women were aware of VHND in their villages. Highest level of awareness was noted in Odisha (92 percent) while in rest of the five states, awareness levels about VHND was between 52 percent to 57 percent. Awareness level was higher in APL families at 62 percent as compared to 56 percent in BPL families.

Access to and satisfaction with Public Distribution System (PDS): Nearly 61 percent (1245 households) reported accessing PDS for subsidized or free food grains. Of these, 81 percent expressed satisfaction over the functioning of the system. Highest satisfaction level was noted in Chhattisgarh (98 percent) and the lowest in Rajasthan (65 percent). Overall, a higher proportion of BPL families (86 percent) were satisfied with PDS compared to APL families (64 percent).

"WE HAVE JANANI SURKSHA YOJANA UNDER WHICH WOMEN ARE GIVEN A FIXED AMOUNT OF MONEY TO PROMOTE INSTITUTIONAL DELIVERY AND INSPIRE WOMEN TO GO IN FOR IT INSTEAD OF HOME BASED DELIVERIES. WE HAVE CONDUCTED 992 DELIVERIES AT THE HOSPITAL IN THE LAST ONE YEAR, OUT OF WHICH, 432 HAVE BEEN PAID. THE REST DID NOT HAVE ADHAAR CARD AND SO THEIR PAYMENT IS PENDING. WE WILL BE ENSURING THAT THEY ARE PAID SOON."

-BMO, CHC Churchu, Hazaribagh, Jharkhand

"THE STATUS OF DELIVERY BY SKILLED HEALTH PERSONNEL IN OUR AREA IS GETTING BETTER. WHEN EXPECTANT MOTHERS APPROACH THE TIME OF DELIVERY, THEY CAN CALL 108 AND 104 NUMBERS. THE WOMEN ARE TAKEN TO THE HOSPITAL FOR DELIVERY SO THAT THEY CAN ENJOY THE BENEFITS OF THE SCHEME. DUE TO THIS, THE STATUS OF INSTITUTIONAL DELIVERIES IS ALSO INCREASING"

-BMO, Rajasthan

While about 91 percent respondents rated the quality of food received through PDS as 'good' (66 percent) or 'very good' (26 percent), high interstate variation was noted. For instance, only 9 percent in Odisha and 12 percent in Bihar rated quality of PDS supplies as 'very good'. This proportion was comparatively much higher for Chhattisgarh (44 percent) and Maharashtra (35 percent).

TABLE 2: COMPARISON BETWEEN BASELINE 2012 AND ANNUAL SURVEY 2014

Indicator	Baseline 2012		Annual Survey 2014	
	percent	No.	percent	No.
Outcome Indicators				
Number of women aware about incidences of serious health problems related to pregnancy and child birth	29.9	8,443	43.5	12,242
Number of women conceiving at least one year after legal age of marriage	77.18	21,793	79.85	22,547
Number of women consuming iron rich /iron fortified food (selecting either millets, green leafy vegetables, fruit, eggs, fish, chicken or meat) (selected as per National Institute of Nutrition (NIN) guidelines)	5.44	10,156	19.51	36,424
Output Indicators				
Number of women benefited under the *Janani Surkasha Yojana* scheme	49.6	14,025	62.15	17,548
Number of women having access to contraceptives	21.37	39,897	37.75	70,473
Number of women having access to safe abortion facility	1.68	1,096	18.58	12,149
Number of births attended by skilled health professionals	44.6	11,449	72.64	18,646
Number of women who received counseling from ANM on care during pregnancy	36.5	10,306	37.8	70,567
Number of women able to articulate different disadvantages of early marriage	5.3	9,950	49.1	91,654
Number of women aware about availability of contraceptives at various levels of public health system	13.8	25,949	40.8	76,167
Number of women aware about availability of abortion services at various levels of public health system	13.8	25,949	14.91	27,843
Number of eligible couples in the intervention area having knowledge of temporary methods of contraception	65.5	121,532	89	166,146

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