

**Enabling the Expansion &  
Sustainability of Integrated  
RCH/Infectious Diseases Outreach  
Services in Ranchi, Jharkhand**  
*Final Evaluation*

CEDPA/India  
Krishi Gramin Vikas Kendra

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ENABLING CHANGE FOR WOMEN'S REPRODUCTIVE HEALTH

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In order to assess the impact of the project, the Indian Institute of Health Management Research (IIHMR), Jaipur was entrusted with the responsibility of carrying out a evaluation study of the same. The study was carried out to record the experiences of the strategies, and interventions, and to evaluate the achievement of the objectives thus far. We are grateful to CEDPA, New Delhi for providing us the opportunity to carry it out. During the process, we received co-operation from the officials of CEDPA. We are grateful to Ms. Marta Levitt Dayal, Country Director and Dr. Bulbul Sood, Programme Management Specialist for their inputs and co-operation.

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### **Project Team**

## Chapter 1

### BACKGROUND

#### 1.1 About the Project

Under the USAID-funded ENABLE project, CEDPA supported Krishi Gramin Vikas Kendra (KGVK), a non-governmental voluntary organisation, to implement the project "Enabling the expansion and sustainability of integrated RCH/ infectious diseases outreach services through skill upgradation, capacity building and women's empowerment in Ranchi, Jharkhand." The project focuses on piloting a community-based sustainability plan through a number of innovative measures. It covered two blocks, namely Ormanjhi and Angara in the Ranchi district. The project aimed to provide integrated, quality, and sustainable reproductive and child health (RCH)/ infectious disease services in Ormanjhi and Angara blocks and the surrounding community of Usha Martin dispensary in Ranchi by upgrading providers' skills, capacity building and women's empowerment and initiating HIV/AIDS activities through a consortium of industries in Jharkhand. The project was implemented for a period of one year, starting from February 2002.

The objectives of the project included the following:

- i. To increase the use of integrated RCH/infectious disease services by expanding the provision of quality, gender-sensitive, sustainable outreach service delivery.
- ii. Expanding outreach services through the sub-centres from approximately 25,000 populations in 19 villages to 50,000 population in 40 villages of Ormanji and Angara blocks.
- iii. Introducing outreach services in 20 surrounding villages of the Usha Martin Ranchi dispensary covering 20,000 population.
- iv. To continue providing quality RCH and infectious disease services to surrounding 30,000 population through the two KGVK rural hospitals in Ormanji and Angara blocks.
- v. To reach 35 per cent CPR for modern contraceptive methods in the original 19 villages and 5 percentage points above the baseline for the additional 21 villages in Ormanji and Angara blocks through expanded informed choice and improved quality of care and counseling.
- vi. To expand choice by increasing the types of effective family planning methods by introducing injectables, NSV, Minilap, LAM, and SDM and introduce social marketing of pills, condoms and injectables.
- vii. 75 per cent of pregnant women are to receive basic antenatal care (3 ANC checkups, 2 TT injections and 100 IFA tablets) in the existing 19 villages and 10 percentage points from the baseline in the 21 additional villages in Ormanji and Angara blocks.

- viii. 40 per cent of deliveries are to be attended by trained/skilled persons in the original 19 villages and increase by 10 percentage points above the baseline in additional 21 villages in Ormanji and Angara blocks.
- ix. To upgrade the skills of service providers through the provision of technical updates on contraceptives and infectious diseases and competency-based training on counseling, infection prevention, IUCD insertion/removal, provision of spacing methods including injectables, Minilap and NSV, STD diagnosis and treatment training of trainers, and HIV/AIDS prevention, counseling and testing.
- x. To forge alliances with the State Government, Panchayati Raj institutions, NGOs and the corporate sector by making it a model private-public partnership project.
- xi. To increase the financial sustainability (cost recovery) of the rural hospitals from 50% to 65% and for the sub-centres from 15% to 35% through increased community contribution, management and ownership, introduction of social marketing and piloting a women's empowerment model of integrating RCH/infectious disease prevention into women's Self-Help Groups.

The outcome of the project would be measured on the following selected indicators:

- Thirteen sub-centres were to be made operational providing a full range of FP/RCH and infectious disease services.
- 70 per cent of eligible couples / families were to be visited by a health worker (HW) and or village volunteer within the last 3 months.
- 35 per cent CPR for modern contraceptive methods were to be achieved in the original 19 villages and 5 percentage points above the baseline for the additional 21 villages.
- A wide range of modern contraceptive methods was to be made available including injectables, OCPs, condoms, IUDs, NSV, minilap, LAM and SDM).
- OCPs, condoms, or ORS were not to go out of stock in the last three months.
- 40 per cent of deliveries were to be attended by a trained/ skilled person in the original 19 villages and 10 percentage points increase above baseline in the additional 21 villages.
- 75 per cent of pregnant women were to receive basic antenatal care (3 check-ups, 2 TT, and provision of 100 IFA tablets) in the existing 19 villages and 50 per cent in the additional 21 villages.
- 80 per cent of children of 0-5 years of age were to be fully immunized in the existing 19 villages and 10 percentage point increase in the additional 21 villages.



- 75 per cent cases of childhood were to be diarrhea treated with ORS in the existing areas and 10 percentage points increase in additional 21 villages.
- 65 percent cost was to be recovered in the rural hospitals and 35 per cent in the sub-centres.

The Indian Institute of Health Management Research (IIHMR), Jaipur was assigned to undertake end-of-project evaluation to assess the achievements of the project objectives during the reference period. Specifically, the end-line-evaluation would explore whether better access to RCH services had an impact on the utilisation of reproductive health services that included antenatal care, natal care, postnatal care, family planning services, etc., and cost effectiveness of health facilities i.e. sub-centres and rural hospitals. The evaluation was carried out with the following specific objectives:

- To review the interventions undertaken during the reference period of the project
- To assess the achievements with regard to the expected results of the project
- To document bottlenecks and success stories of the project
- To recommend corrective measures based on the findings of the evaluation

The End-line evaluation included household survey of eligible women, visit to health facilities, interviews with the medical officers, health care providers, opinion leaders, in-depth discussion with the project staff and public sector representatives, and focussed group discussions with the community. Exit interviews were conducted with the clients in the health facilities. In addition, discussions were held with the staff of primary health centre and members of Jharkhand AIDS Prevention Consortium (JAPC).

Various instruments, developed by IIHMR and reviewed by CEDPA, were used for evaluation. The instruments used were: Schedule for eligible women; Schedule for health workers; Schedule for medical officers; Schedule for exit interviews of the beneficiaries; Schedule for village health committee members; Checklists for focus group discussions; Checklists for discussions with Consortium members and Data Sheet for sub-centres and rural hospitals

## **1.2 Sampling Procedure**

### *Selection of Proportionate Sampling Units (PSU)*

The evaluation was carried out in two sets of villages (original/old and additional/new). Proportionate to Size (PPS) framework of sampling for selection of villages. There were a total of 43 villages (27 new and 16 old). The proportion of new and old villages was 65 and 35 per cent respectively. The household survey was conducted in 20 villages including original/old and additional/new. A total of 1027 eligible women were interviewed.

The following steps were taken:

- a. To select the villages to be used in the survey, a list of all villages (for each set original and additional) with the respective population in the project area was collected.

- b. A three column table was created, where

Column 1 : Serial number of village  
Column 2: Population of each village  
Column 3: Cumulative population of each village

- c. Sampling interval

Cumulative total population / number of villages required

A random number, which was equal to or less than the sampling interval, was selected for selecting the first village. After selecting the first village whose cumulative population exceeds this random number, the next village was selected by adding the sampling interval to the first selected village whose cumulative population just exceeds. The process was continued until reaching the desired number of villages (13 for new and 7 for old set of villages).

#### Selection of Eligible Women

- i) Number of households (HHs) was estimated by asking the health worker/ community leader of the selected PSU.
- ii) The total number of HHs was divided by the desired sample size. (i.e. 50.) to compute the sampling interval. The first household was selected randomly using a random numbers.
- iii) After selecting the first HH, the next HH was selecting by adding the sampling interval to the first HH selected. The process was continued till completion of the desired number of eligible women in a PSU.

Besides household survey of eligible women, 43 exit interviews with beneficiaries at the health facility, interviews with health workers, in-depth discussions with the project staff and public sector representatives, were conducted. All the health facilities funded under the project were visited. The project proposal and the results of baseline survey were collected from KGVK and used for making comparisons with the outcome of the evaluation.

To make sure that the respondents feel free to give full and correct information without any hesitation, female investigators were employed. After selecting the field investigators for the proposed study, they were oriented to the project, its methodology, interviewing techniques and recording of findings. The investigators were given practical training through the mock filling-up of schedules. The evaluation team from IIHMR stayed in the field area and went along with the investigators throughout the duration of the fieldwork to ensure the quality of the data collected. The field investigators were supervised closely in the field itself. The IIHMR team also did spot checking of about 10 per cent of the schedules.

### **1.3 Data Processing**

All the information collected from the field was brought to the IIHMR for processing. All the schedules were edited once again to check for discrepancies and errors that might have been overlooked in the field.

The data entry operation was undertaken in consultation with the staff at the Computer Cell of the IIHMR. Checks were introduced at various places to ensure correct entry of the information. After data entry, 5 per cent schedules were checked for the quality of data entry. The information was processed using Fox Pro and Epi-info version 6 programs.

### **1.4 Limitations of the Study**

- Baseline of the project was a census and the end-line evaluation was based on a sample survey. Therefore, the results of the end-line evaluation need to be compared with caution.
- The duration of the intervention project was too short to make an assessment of change in outcomes and some of the key indicators.

## Chapter 2

### PROJECT IMPLEMENTATION PROCESS

The key tasks in the implementation of the project included development and reactivation of the infrastructure, recruitment of the staff and building their capacity in providing reproductive health services, developing a monitoring and supervision system and establishing a management information system, developing a package of services and mechanisms for service delivery, creating demand through information, education and communication and social mobilization activities, and improving access through outreach and social marketing.

#### 2.1 Reactivated Sub-Centres

One of the key objectives of the project was to expand outreach of the reproductive health services. The project successfully expanded activities from 19 villages covering a population of 16,124, to 40 villages with a population of 42,391, which meant an increase in coverage by more than two and a half times. While six sub-centres were functional before the project, the project succeeded in revitalizing seven more sub-centres and made them fully functional. All the subentries were well equipped with material and equipment. To enhance the access, information about the timings of the centre, the day of the doctor's visit, the name of the health worker, and names of the members of the *swasthya samiti* were displayed at each sub-centre.

Community participation was notable in renovation of the sub-centres. The health workers on their own renovated the centres. The material cost was provided by KGVK. Even one of the sub-centres, was constructed by the health worker himself. This has set a good example of workers' commitment and initiative in the project area, which is a critical ingredient in enhancing community involvement.

#### 2.2 Recruitment of the Project Staff

Availability of health workers at the subcentres is crucial for improving access and availability of health services. Each sub-centre under the project had a health worker who was in-station 24 hours. The health workers recruited for the additional sub-centres of the project were local residents of the area and had received the six-month training of community health workers conducted by KGVK earlier.

Recruitment of local persons has helped in reactivating the existing health centres and has made a significant change in the availability of a health worker at the health facility and provision of services all the day and night. It was evidently clear that the local persons had higher acceptability in the community thus creating greater chances of community involvement in health-related activities. A medical consultant was hired as a project coordinator.

### 2.3 Skill Upgradation and Capacity Building

The project emphasized improved quality of reproductive health services. In order to achieve its goals, a vigorous competency development of all categories of the staff undertaken to upgrade technical and interpersonal skills through on-the-job training. The training programmes conducted under the project were:

#### Training Imparted under the Project

<i>Name of training</i>	<i>Duration of training</i>	<i>Objectives</i>
CTU training	January 3-5, 2002	To provide the latest knowledge to the doctors and other nurses working in the KGVK
Sustainability workshop	February 27-28, 2002 and May 2, 2002	To develop a common understanding of sustainability and skills analyzing service and financial data for decision-making
Injectables contraceptives training	April 15, 2002	To update the doctors and nurses on injection technique
Infection prevention training	April 17-18, 2002	To train the KGVK staff on infection prevention practices
IUCD training	April 29-30, 2002	To make the medical and paramedical staff competent in IUCD insertion and infection prevention
RCH Training	April 30 - May 4, 2002	To make the health workers able to understand RCH package, components and its importance
Standard Days Method	May 1, 2002	To update the doctors and health workers about the method
MIS training	February 7-8, 2002 February 25-26, 2002 June 25-26, 2002	To train the doctors and the health workers in filling up the daily Diaries and in preparing monthly reports
TBA training	July 16-17, 2002 October 17-19, 2002 November 25-27, 2002 December 12-14, 2002	To use the local human resources available for best practices in safe motherhood and child survival
Self-help group training	October 23-25, 2002	To orient the SHG members in the RCH and their role in promoting health
Social marketing training	October 29-30, 2002	To make the health workers able to understand the concept of social marketing

### *Health Workers' Knowledge of Family Planning*

*The health workers were asked about the natural family planning methods. They explained that LAM is postpartum breast-feeding and is successful to some extent if the woman is:*

- breast feeding exclusively,*
- amenorrhoeic*
- less than six-months post-partum*

*They were told about Standard Days Method - a fertility awareness-based method that is appropriate for women with regular menstrual cycles of between 26 and 32 days long. To prevent pregnancy, the couple should avoid unprotected intercourse during the 12-day fertile window. To monitor the cycle length, cycle beads and wall clocks were used. Each bead represented a day of the cycle. About one-half of the health workers narrated all the steps one by one while the remaining were able to tell all the steps but not step by step or in the proper order. All the health workers knew about the use of the condom.*

*On being asked about the knowledge of OCP When can a woman start using OCP? a majority of the health workers knew that it should be started in the first five days of her menstrual cycle whereas the rest said that it should be started in the first day of the menstrual cycle. What should a woman do if she misses one pill? All the workers gave the correct response: "She should take the forgotten pill as soon she remembers." What should a woman do if she misses two pills? A majority of the workers could respond correctly: "She should take two pills the next two days, then continue taking one pill everyday and use condoms for seven days." The rest did not mention the use of condom in addition to oral pills. What should be told to a woman having common side effects of pills? A majority of the workers correctly said: "Do not worry, these symptoms will not harm you and will disappear in 2-3 months." Some said that they would tell the client to stop the pills and consult the doctor. The rest of them did not respond to this question during the interview.*

*The health workers were asked about the major problems that they faced in rendering services. A majority of them spontaneously responded that they did not have any problem in rendering services. About one-half of the health workers reported that they had problems mainly in dealing with the Swasthaya committee members. They said that the members did not cooperate with them, especially in conducting meetings and finalizing the dates of meetings. Besides, they were reluctant to attend the meetings (bahu bulaane par aate hein).*

The training of medical officers has yielded desired dividends in terms of increased perception and awareness of roles and responsibilities, enhancement of requisite skills and commitment to the project.

The medical officers and health workers perceived training as very useful and strengthened their capacity to performance the tasks effectively. They felt that the CEDPA supported training provided them an opportunity to translate information into action that influenced individual behavior and improved community health.

These training programmes clarified their concepts, removed their doubts, resolved their misconceptions, imparted new knowledge on IUCD and injectables, and finally increased their self-esteem.

The training also enabled them to develop their technical and communication skills. The evaluation revealed that all the medical officers knew and practiced GATHER steps while counselling the client. Similarly the health workers felt more competent and comfortable in counselling the clients (*bolne mein hitchkichahat kum hoti hai, niyamanusar bata sakte hein*).

The medical officers were also asked about the use and technical aspects of various contraceptives (condoms, OCPs– their starting and side effects, IUDs, and injectables) and the results revealed that they had correct and complete knowledge about the same. Besides the modern methods of family planning, the health workers also talked about natural methods, namely lactational amenorrhoea method (LAM) and Standard Days Method (SDM). However, health workers’ knowledge about advantages, disadvantages and side effects of each family planning method needs to be updated regularly.

The service providers were found to have the requisite knowledge about the preparation of the bleach solution, use of the puncture resistant sharp disposal container, and handling hospital waste disposal with respect to infection prevention and control.

Training in management information system (MIS) played a major role. It was imparted to the health workers to conduct the baseline survey in a better way and to utilize the information effectively for further activities in their respective area. Family cards and daily diaries were also shown to the health workers, explaining how they should fill them. The involvement of the health workers in conducting baseline survey helped the workers to assess the situation on their own resulting in high degree of perceptibility and ownership.

One spinoff effect of training was that the medical officers felt that it has enhanced their training competence as trainer. Soon after their training, they were able to provide good quality training to the staff at different levels. The medical officers organized TBA training programmes in KGVK. One of the doctors was also invited as a resource person to train TBAs by Swa-Shakti Project, Patna.

#### **Swathaya Samiti (Health Committies)**

*Each sub-centre had a Swasthaya Committee whose aims were close monitoring by the community (33%) and educating and motivating the community about health-related issues (33%). Though initiatives were undertaken, concrete achievements in this direction were yet to be seen. More efforts are needed to communicate the broader as well as specific objectives to the health workers to “make the community feel their ownership which results in sustainability”.*

## **2.4 Service Delivery Package**

Another important objective of the project was to develop an integrated package of reproductive health services and provide it through the health facilities (rural hospitals and sub-centres) under KGVK. The rural hospitals in Angara and Ormanjhi were well-equipped and provided a comprehensive range of health care that included the following: Outpatient consultation; Inpatient care; Emergency services; ANC/NC/PNC; Family planning; Social marketing of RCH products (pills, condoms, ORS, DDKs, IFA, etc.); Child health services; General medicines;

Pathology services; Surgery; Organization of camps; Infertility treatment; Referral services; Follow-up services; and Support to KGVK sub-centres.

While rural hospitals were equipped to provide a wide range of clinical and reproductive health services, a service package for each sub-centre was developed that included: provision of antenatal care (checkup, TT immunization, IFA); delivery by trained personnel; postnatal care with referrals; family planning counseling, including newly married and postpartum women, and provision of a full array of contraceptive methods; social marketing of RCH products (pills, condoms, ORS, DDKs, IFA, cycle-beads, clocks, disposable syringes, etc.); immunization services for children aged 0-5 years; treatment of diarrhea; general medicines; referral services; follow-up services; and laboratory services (linked with the rural hospitals).

## **2.5 Information, Education and Communication (IEC)**

The IEC activities mainly included school health camps and health talks, which were held at various sub-centres. The main objective of these activities was to sensitize the community about reproductive and child health (RCH) related issues, including RTIs/STIs/HIV/AIDS. Other than health talks and camps, street plays were also performed in some of the villages and centres. Each health centre displayed posters and pamphlets related to ANC, diarrhea, anaemia, safe delivery, malaria, TB and HIV/AIDS to make the community aware. A list of essential drugs was also displayed at some of the centres. The IEC activities and interventions undertaken facilitated the people to understand the messages related to RCH.

## **2.6 Networking and Logistics Management**

It was envisaged that the project would create strong linkages with the government, locally elected leaders, and local service providers to facilitate sustainability aspects. The KGVK strengthened its linkages with the public sector to provide services to the community. The KGVK procured vaccines from the primary health centres in the block.

A *Swasthya Samiti* (Health Committee) was set up to assist the health workers in creating a demand for services and social marketing. Each *Samiti* had 11 members including Traditional Birth Attendants, *Angan Wadi* worker, helper at *Anganwadi* Centre, and Auxiliary Nurse Midwife. Under the *Swasthya Samiti*, a *Nigrani Samiti* was established to keep an eye on the centre and its functioning. Guidelines were also developed for the health committee members prescribing monthly meetings (fortnightly meetings in case of epidemics), documentation of the proceedings, the presence of at least one member from each village covered by the centre, women representation, etc.



## 2.7 Supervision and Monitoring

A system of supervision was established under the project. The doctors visited the health centres weekly. During the visit, the doctors accomplished their tasks by helping the health workers to develop task-related competencies and the capability to face problems effectively. Besides, the health workers also used to come to their respective rural hospital, which were Rukka hospital in Ormanjhi block and Narain Soso hospital in Angara block) for weekly meetings, which gave the doctors another opportunity to know their performance and progress made during the week. Sometimes home visits were made. The doctors tried to know the perceptions of the community by talking to the *Swasthaya Samiti* members and the community. These meetings were utilized in various ways, for example, to deposit the amount of social marketing and to share/discuss the progress made and problems faced. The doctors provided possible options as solution to their problems and the health workers decided for them. It is worth mentioning that it was compulsory to attend the meetings. If anyone was not able to come to the respective hospital, s/he was supposed to inform the hospital in advance. The risk involved was that s/he would be considered absent throughout the week. Besides, the chief medical officer made surprise visits.

During their weekly visits to the sub-centres, the doctors monitored the centre's as well as the workers' activities. Monitoring was done through a system of collecting information about quantitative and qualitative performance.

An effective tool for supervision and monitoring used was the development of activity plans by using three columns: activity, to be conducted/ performed by whom, and when (with date). Though there is no empirical evidence for this observation, however, they reflected during interaction with them that this tool has really empowered them.

## 2.8 Management Information System

There was a centre-based and a field-based management information system. CEDPA had developed an elaborate MIS format including "family card" and "daily diary", which were used by the project staff for field visits. Field workers were provided with printed books of "pariwar card" and "daily diary" which provided information on clients and visits to them.

Various formats were developed for centre-based information system and used to maintain information on income and expenditure, services delivery, stock of medicines, procurement of equipment and medicines. The centre-based MIS included:

- OPD register (doctor's visit and daily OPD)
- ANC register
- Immunization register
- Social marketing register
- *Swasthaya Samiti* register
- PNC register

- Stock
  - Medicines
  - Accounts (of money to be collected from those who have yet not paid)
- Accounts (of money deposited in the hospital)

On a monthly basis, the doctors collected and compiled the data obtained from the weekly reports from the sub-centres and developed a monthly report of the progress made. The quality of record keeping at the health-centres was emphasized.

## 2.9 Social Marketing

To improve demand for family planning in the project area, the health workers introduced the sale of condoms (Deluxe Nirodh and Mithun), oral pills (Mala-D and Apsara), disposable delivery kit (DDK), disposable syringes, ORS packets, IFA tablets etc through social marketing. This was in addition to the government supplies. To promote Standard Days Method (SDM), cycle beads and clocks were also made available. Depo-Provera could also be obtained only in consultation with the doctor.

## 2.10 Sustainability/Cost Recovery

One of the most important components of this project was the sustainability through enabling the community to take active part in the management of the local services. The KGVK had already initiated the process of sustainability in their overall health services area. Revenue was generated/ recovered mainly by charging fees for medical consultation, pathology testing, X rays, deliveries, and surgery. The following charges were decided for various services:

SNo.	Rural Hospital		Sub-centre	
	Services	Charges (Rs.)	Services	Charges
1	Outdoor consultancy/ registration	10.00	Outdoor consultancy/ registration	10.00
2	Indoor (Observation + stay)	25.00	NA	
3	Emergency services	25.00	NA	
4	Hydrocele operation	300.00	NA	
5	Tubectomy	0.00	NA	
6	Vasectomy	0.00	NA	
7	IUD insertion	0.00	NA	
	Investigations			
8	Blood- Hb%, TLC, DLC ESR	20.00	The pathology services were available at the hospital only. The health workers collected the blood/ urine/ sputum samples at the sub-centre and sent them to the respective hospital.	
9	Blood- PS for malaria, type of anaemia	20.00		
10	Blood- BT/CT	20.00		
11	Blood- Grouping Rh. & Cross matching	20.00		
12	Urine-Routine (Sugar and Albumin) and microscopic	20.00		
13	Urine- Bile salts and bile pigment	20.00		
14	Stool- Parasites (Ova and Cyst) and Occult Blood	20.00		
15	Stool- Hanging drop (V Cholera)	20.00		
16	Sputum-AFB	0.00		
17	Blood-VDRL	30.00		
18	Pregnancy test	50.00		
19	Social marketing of contraceptives		Selling of contraceptives	

	Deluxe Nirodh	Rs. 4.40/packet	Deluxe Nirodh	Rs. 4.40/packet
	Mithun	Rs. 5.00/ packet	Mithun	Rs. 5.00/ packet
	Mala-D	Rs. 2.00/ cycle	Mala-D	Rs. 2.00/ cycle
	Apsara	Rs. 3.20/ cycle	Apsara	Rs. 3.20/ cycle
20	Cycle Beads for SDM	Rs. 45.00	Cycle Beads for SDM	Rs. 45.00
21	Depo-Provera	Rs. 30.00/inj.	Depo-Provera	Rs. 30.00/inj.
22	DDK	Rs. 15.00/ pc.	DDK	Rs. 15.00/ pc.
23	Distribution of ORS packets	1.50 for small 10.00 for big	Distribution of ORS packets	1.50 for small 10.00 for big
24	IFA tablets	1.00 / tablet	IFA tablets	1.00 / tablet
25	Disposable syringes	Rs. 5.00/piece	Disposable syringes	Rs. 5.00/piece
26	Health card (family card)	30.00	Health card (family card)	30.00

A family card system was established by the KGVK. If a family was registered through this card (costing rupees 30/-) at the centre, it could avail itself of the health facility (health centre and rural hospital) on a concession basis for a three-month period. Again, they might renew the card by paying the same amount of Rs. 30/-.

The *Swasthaya Samiti* had a provision to have 50 per cent of the registration fee, which comes to five rupees. Similarly, the family card charges (Rupees 30/-) would go to the *Samiti*. The purpose was to strengthen the *Samiti* financially so that the committee could spend money on activities related to health like maintenance of the sub-centres, arrangement of meetings/talks, transportation arrangements, etc.

## **2.11 Consortium of Industries and NGOs for the Prevention of HIV/AIDS in Jharkhand**

First meeting of the Jharkhand AIDS Prevention Consortium (JAPC) was held in Ranchi, in August 2002, Approximately 40 participants from industry, NGOs and Government participated in the first meeting in which resolution to establish a consortium was passed. Mission of consortium has been to work together to maximize all available resources and empower people in order to reach out to all members of the society to make Jharkhand AIDS-free.

The purpose of this consortium is to bring together committed individuals, communities and organizations to achieve the common goal of preventing HIV/AIDS by sharing expertise, experience, assets and best practices in order to achieve following objectives:

- To increase availability of counseling and testing services;
- To increase the geographical and population coverage of HIV/AIDS prevention activities;
- To mobilize communities throughout Jharkhand for the prevention of HIV/AIDS;
- To promote proper use of and increase access to condoms;
- To build capacity of non-governmental organizations, industries, opinion leaders, health care providers for the replication of best practices in the prevention of HIV/AIDS;

- To conduct research, collect and disseminate information on HIV/AIDS in Jharkhand;
- To advocate for the implementation of effective HIV/AIDS prevention strategies and for programme changes outlined in the National AIDS Control Organisation HIV/AIDS policy; and
- To share and develop Information Education and Communication material that contains a jointly agreed set of technical messages and is appropriate to local cultures, values and languages and is disseminated as per local need.

Since its formation in August 2002, JAPC has had several governing body meetings in which, besides finalising the name of the consortium, it was decided to have four Regional Co-ordination Centres (RCC). JAPC has been very active since its formation and has initiated membership drive and opened a bank account; it is planning to issue a newsletter. State AIDS Control Society (SACS) too have been actively involved in the consortium and the Director of SACS is the President of the JAPC.

The IEC materials developed by the RCCs at Bokaro, Jamshedpur and Ranchi have been collected centrally for redesigning, printing and further actions. The RCCs are making all efforts to recruit as many members as possible in the society.

Under the auspices of JAPC, KABP survey on Male Reproductive and Sexual Health including HIV/AIDS was conducted in the three cities of Ranchi, Bokaro and Jamshedpur with the help of three RCGs and ORG-MARG with technical assistance provided by CEDPA. Questions were also asked on services desired by truckers and helpers and their willingness to pay for the services if Male Clinics were initiated at these sites. Based on the finding plan is to pilot Male clinics at three sites in Jharkhand.

## **2.12 Baseline Survey**

The KGVK project staff and the health workers carried out a baseline survey to establish the baseline indicators on which the progress was measured. The baseline covered two blocks 40 villages in the Ormanjhi and Angara blocks and 20 villages surrounding Usha Martin Groups of Industries in Namkum block of Ranchi district. The survey covered the population of both the original/old and additional/new sub-centres. The major purpose of baseline survey was to assess the situation of key reproductive health indicators and establish benchmarks for various indicators aimed at strengthening reproductive health services. The survey was conducted during March – April 2002. It included information about family members, contraceptive users, women who had delivered in the last 12 months, antenatal, natal and postnatal care services received, and immunization status of children.

The key finding of the baseline survey was that 45.1 percent eligible couples were using modern contraceptive methods in the project area. Among the contraceptive methods, female sterilization was the dominant method (38.0 percent). More than half (54.4%) of the pregnant women received antenatal care. It was lower in the newly expanded area of the project. The average coverage with two doses of TT was fairly high, i.e. 75 percent. However, the coverage

with TT2 was much higher in the old existing project villages. Nearly half the pregnant women (46.3 percent) had received iron folic acid tablets. The survey further revealed that 47.5 percent children (12-23 months) had received full immunization in the project area. The baseline status of various reproductive health indicators is shown in Table 2.1.

**Table 2.1: Base-line Survey Results**

<i>Indicators</i>	<b>Old Sub-centres</b>			<b>New Sub-centres</b>			<b>Combined</b>
	Anga	Orma	Comb	Anga	Orma	Comb	
Total population	5,524	10,600	16,124	1,799	8,275	26,267	42,391
Eligible couples	1,010	1,736	2,746	3,184	1,536	4,722	7,468
Contraceptive Prevalence Rate (CPR) – any method	36.9	50.1	45.2	49.1	42.7	47.0	46.4
CPR (modern methods only)	36.5	50.0	44.9	48.1	39.3	45.2	45.1
Family planning method users							
Condoms	2.4	4.5	3.7	2.5	1.6	2.2	2.8
Oral pills	1.8	4.5	3.0	4.3	1.9	3.5	3.3
IUDs	0.4	0.4	0.4	1.3	1.4	1.3	1.9
Sterilization (Total)	31.9	41.0	37.7	40.0	34.5	38.2	38.0
Vasectomy	0.6	0.5	0.5	0.9	0.3	0.7	0.7
Tubectomy	31.4	40.5	37.1	39.0	34.2	37.4	37.3
Natural	0.4	0.4	0.4	1.0	3.3	1.8	1.3
Women who had delivered a child during the last 12 months	12.4	17.3	15.5	14.9	17.1	15.6	15.6
Received ANC							
3 Check-ups	49.6	79.0	70.3	48.2	39.9	45.2	54.4
2 TT	84.8	87.7	86.8	75.8	55.9	68.7	75.3
100 IFA	36.8	75.3	64.0	38.1	32.7	36.2	46.3
Delivery by trained personnel	26.4	82.7	66.1	64.2	36.1	54.2	58.5
Children (12-23 months) Fully immunized	23.5	60.4	51.0	54.7	19.3	45.5	47.5

### 2.13 Feasibility Study

A feasibility study was conducted by TNS MODE Private Limited at the request of KGVK with technical support from CEDPA. The purpose was to explore the current health expenditure of the households, source of utilization of health services and willingness of household to pay for specific services. Data were collected on desired services and health products, community willingness to pay for medicines and services, preferred brands, and hours of services desired. Besides collecting information from 405 families, ANMs, TBAs, KGVK workers, private health service providers, chemists and members of village health committee were interviewed. A cost pricing analysis on the existing services and RCH products was also conducted.

Salient findings were that knowledge of KGVK health facility in the community was good, but there was tremendous scope to involve the health committee. Majority of families had shown willingness to have comprehensive health insurance for both OPD services with investigations and indoor services for the entire family. Families were also willing to pay for the package of

ANC along with delivery services if they were at reasonable and affordable cost. Non-availability of doctors at KGVK hospitals round the clock was a deterrent for not delivering at these facilities. One of the recommendations was also to develop a referral network with private health service providers.

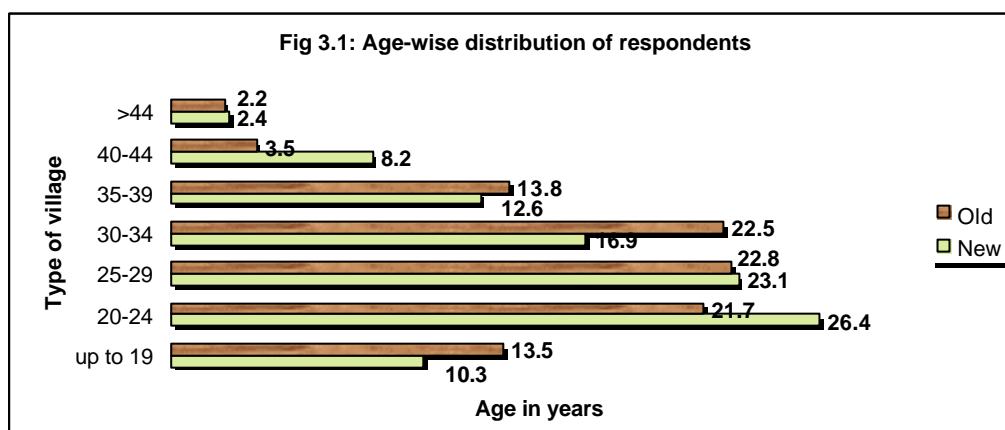
Based on the recommendations, KGVK has developed linkages with Saren Laboratory in Ranchi for conducting various investigations, which were earlier not done in their laboratory. Samples are collected at the hospitals and health centres, sent to the laboratory and clients collect the report from the collection sites. This has resulted in client satisfaction along with increased revenue for KGVK. Based on feasibility study, KGVK has also introduced package of ANC, deliver and PNC services, which again is proving successful.

## Chapter 3

### REPRODUCTIVE HEALTH AND FAMILY PLANNING SERVICES

In this section, the findings of the end-line evaluation (eligible women survey) are presented on accessibility and availability of services; utilization of services; antenatal, natal and postnatal care; family planning practices; reproductive tract infection; sexually transmitted infections; HIV/AIDS, etc. The findings are presented separately for additional (new) and the original (old) villages and the combined analysis of both areas.

The eligible women were the key respondents. The evaluation covered 1027 eligible women. Figure 3.1 shows the age-wise distribution of the respondents.



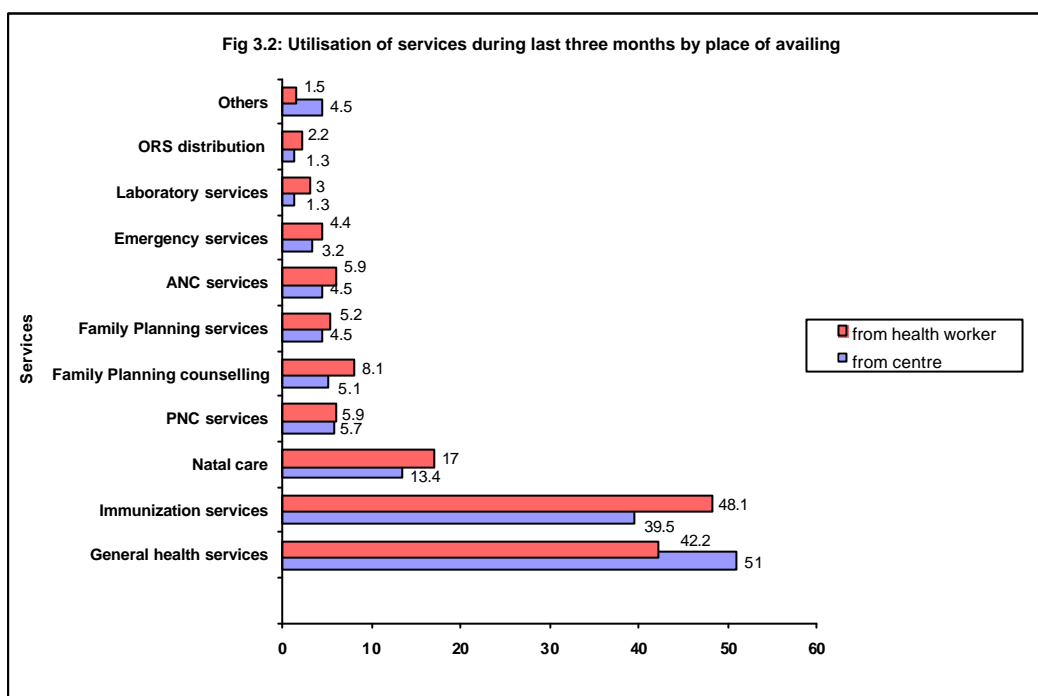
#### 3.1 Awareness and Utilization of Services

The project was already functional in the old set of villages and quickly established itself in the newly added villages. The IEC activities, a major component in the project, had evidently influenced awareness and knowledge of the households. A huge majority of women, 79 percent, were aware of the project and the activities. Most of them had learned about it from the relatives and friends, in addition to the project staff. However, knowledge about the services varied. A majority of them (77%) knew the project health worker and 79 per cent could identify the project health worker either by his/her name or her husband's name or the place where s/he resided. About one-half of them (48%) had met the project staff at the sub-centre, while 40 per cent met them during their home visit.

The utilization of services had significantly increased. However, the type of services utilized varied. Of the women who visited the centre, as many as 92 percent had utilized the services, with nearly one-half availing of general health and immunization services. The remaining women did not visit the centre intentionally as they had no need. The centre was situated close to their residence and they usually visited the centre when their schedule permitted, sometimes to have a casual conversation with the service provider. Similarly, during the home visit and/or *Anganwadi* centre, etc. in the village other than the sub-centre, 84 per cent had utilized the



services, with 48 per cent availing of immunization, followed by general health services, such as providing medicines (42%). Services rendered at home included treating injuries from accidents, treating high fever (emergency), providing IFA (ANC), and collecting blood sample (laboratory). Fig. 3.2 shows the service utilisation.



### 3.2 Performance Indicators

The project had identified key project related performance indicators to be achieved by the end of the project. The end-line evaluation considered the baseline survey findings to assess the performance and achievement of objectives. Table 3.1 below provides comparison of baseline indicators related to ante-natal and natal care of women who had delivered child during the last 12 months and immunization status of children aged 12-23 months with the end of project indicators.

**Table 3.1: A comparison of baseline and end-line project-related indicators**

	New Sub-centres		Old Sub-centres		Total	
	Base	End-line	Base	End-line	Base	End-line
Women who had delivered a child during the last 12 months	15.6	14.9	15.5	17.9	15.6	16.0
Received ANC						
Check-ups	45.2	65.3	70.3	63.6	54.4	64.6
2 TT	68.7	72.4	86.8	78.8	75.3	75.0
100 IFA	36.2	56.1	64.0	59.1	46.3	57.3
Delivery by trained personnel	54.2	43.8	66.1	50.0	58.5	46.3
Fully immunized Children (12-23 months)	45.5	77.7	51.0	81.4	47.5	78.8

### 3.3. Antenatal Care

Among the eligible women, 164 (16%) delivered a child during the project period. Overall 64.6 percent of them availed of antenatal care as against 54.4 percent at the beginning of the project, with a clear increase of 10 percentage points. However, in the base-line survey in the original (old) villages it was 70.3 percent, and in the new villages, it was found to be 45 percent. Thus, in the new villages the change was 20 percentage points.

Similarly, the performance regarding TT2 immunisation was maintained at a high level as was reported in the baseline survey. The end-line survey reported a coverage of 75 percent with TT2, which was much higher than reported in RCH surveys in the state. The project has maintained a high performance despite increase in the population and number of villages under the project.

Coverage with iron folic acid tablets as prophylaxis against anaemia also showed about 10 percent point increase at the end of the project. As many as 67 percent received iron folic acid tablets during pregnancy against 46 percent at the beginning of the project. However, the differentials between the old and new villages existed.

It is worth recording that the proportion of deliveries conducted by the trained personnel was reduced from 58.5 percent to 46.3 percent, a reduction of about 12 percent points. However, the absolute number delivered by trained personnel has shown a significant increase. The proportion mainly declined due to increased denominator due to expansion of population under the project.

### 3.4 Natal Care

The proportion of institutional deliveries was low. More than three-fourths of the deliveries had been conducted at home. Of these, one-third (32%) had been conducted by trained persons. About 30 per cent women reported that Disposable Delivery Kit was used during the delivery. The result shows that the use of DDK was higher in the new set of villages.

According to the NFHS-II, nearly 81 per cent of deliveries took place at home in Ranchi district; three-fourths of them were performed by untrained persons.

### 3.5 Child Immunization

The vaccination of children against six serious but preventable diseases (tuberculosis, diphtheria, pertussis, tetanus, poliomyelitis, and measles) has been the cornerstone of the child health care. Immunization was the key component of the reproductive health services in the project.

For the purpose of immunization coverage evaluation, the age group 12-23 months was considered. The project registered a spectacular performance. In all, 78.5 percent children were fully immunized (BCG, DPT 3 doses, OPV 3 doses and measles) against the desired output of 80 percent. The immunization status of children was better in the old set of villages than in the new ones (Table 3.2).

**Table 3.2: Percentage of Children (12-23 Months) Who Received Complete Immunization**

Age	Desired Output (%)	New		Old		Overall	
		Sample size	Fully Immunized	Sample size	Fully Immunized	Sample size	Fully Immunized
12-23 months	80	103	77.7	43	81.4	146	78.8
12-60 months	80	488	81.8	239	82.4	727	82.0

### 3.6 Management of Diarrhea

All the mothers having children under five years were asked whether their children had suffered from diarrhoea during the reference period and during two weeks prior to the survey. The operational definition given for diarrhoea was “one or more loose watery stool in large amount within 24 hours<sup>1</sup>”. About 13 percent women reported episodes of diarrhea among their children during 15 days preceding the date of data collection. However, the use of ORS was low. Only one-third of the women reported the use of ORS during diarrhea. Of those who used ORS, about 70 percent obtained it from the sub-centre or the project health workers. Keeping in view the general trends in use of ORS in the region, its use the project area was fairly satisfactory.

<sup>1</sup> Singh et.al. ((2002) End line Evaluation of Ninth India Population Project: Rasjathn. Indian Institute of Health Management Research (IIHMR), Jaipur

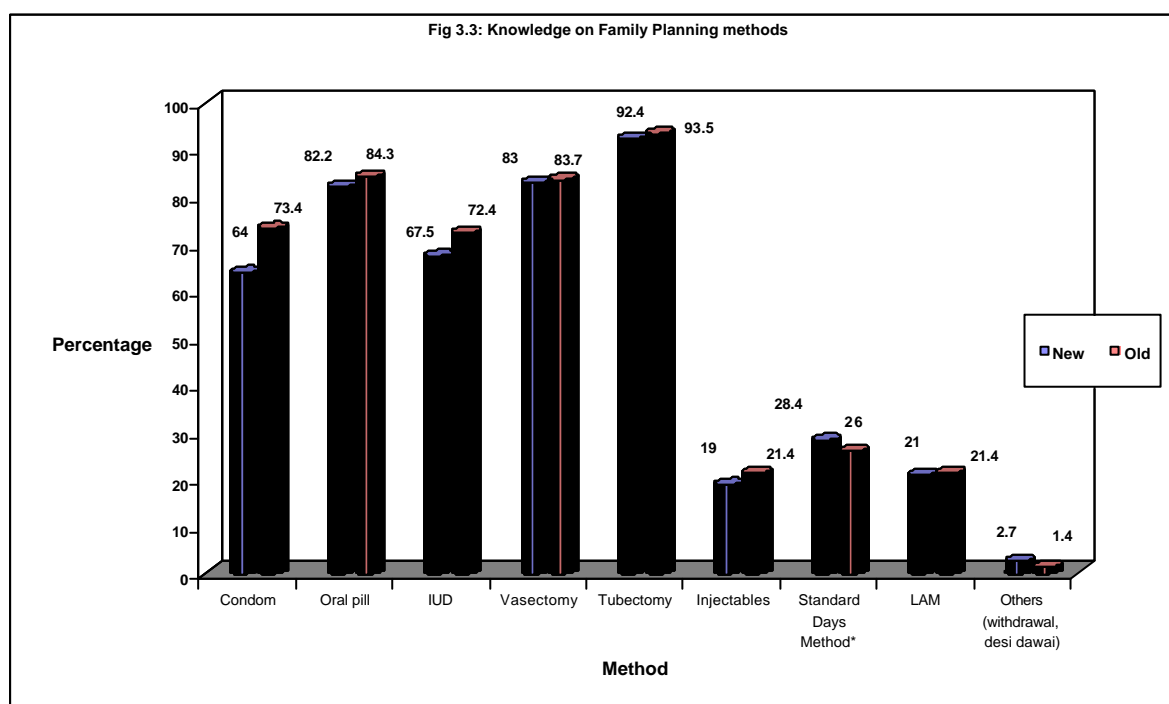
**Table 3.3: Prevalence of diarrhea and ORS distribution**

Diarrhea and Use of ORS	Total
Percentage of children suffered from diarrhea during last 15 days (n=896)	12.8
Percentage of children given ORS (n=115)	32.2

### 3.7 Knowledge of Family Planning Methods

Knowledge of contraceptive methods was nearly universal in the project area, with 98 per cent of currently married women knowing at least one method of contraception in both old and new areas. Female sterilization was the most widely known method of contraception, followed by male sterilization. The oral pill was the most widely known spacing method (83 per cent), followed by IUD (69 per cent) and condoms (63 per cent) as shown in Figure 3.3.

It was a major effort in the project to raise the knowledge of women regarding contraceptives, especially the spacing methods. The project has made serious efforts to raise the awareness regarding spacing methods and making them available.



### 3.8 Current Use of Family Planning Methods

Raising the contraceptive prevalence rate (CPR) was an important objective of the project. It aimed to reach 35 per cent CPR for modern contraceptive methods in the original 19 villages and 5 percentage points above the baseline for the additional 21 villages through expanded informed choice and improved quality of care and counseling. The current contraceptive use was defined as contraceptive use during the 30 days preceding the date of data collection.

The Project has achieved an increase in CPR by 6.5 percentage points within the project period. In additional set of villages it was found to be 5.3 percentage points while in original villages, it was 8.7 for modern methods only. The data show that current CPR for any method was 44.5 with an increase of 9.7 points.

In the project area, as is the case of Jharkhand and other states, voluntary sterilization dominated the contraceptive method-mix. 34.3 percent of currently married women were sterilized, and female sterilization accounted for 83.6 per cent of the total current contraceptive prevalence. Only 6 percent of the currently married women used spacing methods (Table 3.5). By chance, no standard days method user was found during the survey. During the focus group discussions, it was found that a few women use the method.

**Table 3.4: Percent distribution of eligible couples by use of any modern method of contraception**

Family Planning Method	Contraceptive use as per IHMR Survey 2003					
	At the time of initiation of the project (before 10 months)			At the time of Evaluation		
	New	Old	Total	New	Old	Total
Condom	0.7	0.8	0.8	1.5	2.4	1.8
Oral Pill	1.4	1.3	1.4	2.9	4.1	3.3
IUD	0.4	0.8	0.6	0.9	1.3	1.1
Vasectomy	0.4	0.3	0.4	0.4	0.3	0.4
Tubectomy	32.1	29.8	31.1	34.6	33.6	34.3
Injectables	0	0.3	0.1	0.0	0.3	0.1
Total number of users	231	123	354	266	155	421
Total Eligible Couple	658	369	1027	658	369	1027
CPR (Modern method only)	35.1	33.3	34.5	40.4	42.0	41.0

### *Quality of Care for Family Planning Services*

During the reference period, most of the oral pill users (65%) were screened or checked before using the pills. As many as 35 percent of the OCP users received follow up services and 10 percent of them were helped by the project staff.

Among the women who opted for sterilization, 55 percent underwent screening/ check-up and received follow up (FUP) services. For follow up services, the project staff helped 19 percent women.

### **3.9 Reproductive Health Problems**

About three-fourths of the women had heard about RTIs (*andruni / parda/ gupt rog*). More than half of the women (56%) had received such information from their friends and relatives. About one-third of the women knew that it is caused due to lack of personal hygiene. Most of them did not know or had misconceptions about the cause. More than 70 per cent women knew about the symptoms. An overwhelming majority of women ( $\geq 90\%$ ) knew about boils, ulcer, itching, burning sensation during urination and white discharge. A majority of the women (75%) knew that RTIs were curable.

The results revealed that as many as 39 percent respondents had heard about sexually transmitted infections (*Yaun sankramit rog*). The symptoms identified were: burning sensation during urination (90%), white discharge (87%), itching (86%), and boils (85%). Most of the women (63%) knew that treatment is available and STIs are curable.

Although the spread of HIV/AIDS was a major concern of the agency, nearly 7 out of 10 women in the area had not heard of AIDS, compared with 85 percent for Jharkhand as a whole. Among women who had heard of AIDS, 67 percent received information about the disease from television and 37 percent from friends and relatives. About 35 percent of the women did not know any mode of HIV/AIDS transmission. About 7-14 percent women believed in some myths about its mode of transmission. Among women who had heard of AIDS, 38 percent did not know of any way to avoid infection. Among the women who had heard about the same, 37 percent had the impression that treatment of HIV/AIDS was possible or AIDS was curable.

The prevalence of reproductive health problems among the women was estimated from the women's self-reported experience with each of the problems. However, since information on reproductive health problems was based on self-reports rather than clinical tests or examinations, the results should be interpreted with caution.

Among RTI symptoms, white discharge (6%) was most common. Other symptoms, such as genital ulcer/ boils, micturation, itching, and lower abdominal pain were reported by 3-4 percent women. As many as 33-69 per cent of the women who had suffered from any symptom had sought treatment. Most of the women approached a government or a private doctor.

**Table 3.5: Self-reported symptoms of RTIs/STIs among respondents and by source of treatment sought by them**

Total (n=741)*						
Symptoms	% Suffered	% Sought treatment	Sources			
			Project staff	Govt. Doctor	Pvt. Doctor	Others
White discharge	6.3	57.4	3.7	14.8	40.7	40.7
Micturation	3.8	35.7	0	40.0	40.0	20.0
Itching in genital area	3.0	45.4	20.0	20.0	30.0	30.0
Genital ulcer/boils	3.5	46.1	16.7	16.7	25.0	41.7
Lower abdominal pain	3.5	34.6	0	11.1	66.7	22.2
Abnormal discharge from penis	0.8	50.0	0	66.7	33.3	0
Intercourse related pain	1.1	37.5	0	33.3	66.7	0

\*Those who have heard of RTI

### 3.10 Exposure to Information, Education and Communication (IEC) Activities

All the women who responded to the end line survey were asked about their exposure to IEC activities conducted under the project. The results revealed that as many as 39 per cent of women were aware of such activities. Of these, 91 percent women had attended group meetings in their village/ area. The contents of the discussions in the meetings were family planning (51 percent), followed by immunization (30 percent).

More than one-half of the women reported that Self-Help Groups (SHGs) were formed in their villages and that they were members of these groups. However, the SHGs were not formed under the project. The project staff did utilize the opportunity for participating in the monthly meetings of SHGs. About 42 per cent women observed that the project brought some improvement in their area.

### **Health Committee Members/ Opinion Leaders**

*A total of 20 members including the Swasthaya Samiti members and the Anaganwadi workers were interviewed. An overwhelming majority of them (90%) were men in the age bracket of 20-30 years (70%), and Hindus (95%) belonging to other backward castes or scheduled castes / tribes. Their main occupation was agriculture. The main health problems in the area were malaria and diarrhoea. Most of them reported that they were consulted about the project.*

*These members or leaders knew about the services available at the centre, such as distribution of general medicines (dawa dete hein); immunization (65%); safe motherhood (55%); family planning (55%); health education (35%); doctor's visits, services related to child health; counselling; and selling of ORS. When asked how they had come to know about them, the responses were: from the health worker, in community meetings, at the centre, during the doctor's visits, and from AWWs. They were also asked whether the community was actively participating in the intervention. About 50 per cent of them reported in the affirmative. The positive responses were supported by some details, e.g. the community members attended meetings, they extended information to others and provided/ arranged transportation. The negative responses included restricted availability of medicines (since the worker was not allowed to prescribe drugs excepting paracetamol, etc.); shortage of health service providers, lack of trust in the providers, etc. When asked whether the samiti meetings were useful, the members said that they were useful for new knowledge and information, performance evaluation, better coordination, understanding of both client and provider perspectives. To make the health samiti more effective, they suggested the following measures: creating awareness, availability of medicines at the centre, increasing the number of staff, regular visits of the doctor with a longer stay (at the time of the doctor's visit, women used to be in the field), etc. Besides, they played an active role by supervising the centre activities, sharing information with others, motivating the couples, problem solving, etc. Most of them perceived the project as a successful intervention for various reasons, for example, they did not have to go outside, doctor's availability, cost effectiveness (yahan das mein hota hai dusri jagah pachas lagenge), immunization of children, facility available at the doorstep, and referral. Again when they were asked how these benefits would be sustained with not so intensive involvement of the KGVK, they observed that the community people had good intentions to sustain but were not able to identify the measures for it.*



### Medical Officers' Perspectives

When asked the medical officers about their satisfaction with the project's achievements their response was in the affirmative. They justified their response mentioning regular visits of the doctors to the centres and the hospitals, training inputs from CEDPA, increased ANC and immunization coverage.

Enabling the expansion and sustainability of integrated RCH/infectious diseases outreach services through skill upgradation, capacity building, and women's empowerment in Ranchi, Jharkhand.”

They also made the following suggestions:

- The project staff should be imparted management training.
- More efforts on the part of the project staff towards social marketing were needed.
- Performance based honorarium to the health workers should be introduced.
- The project staff should make more efforts to ensure the involvement of the *Swasthaya Samiti* and the community.

## Chapter 4

### COST RECOVERY

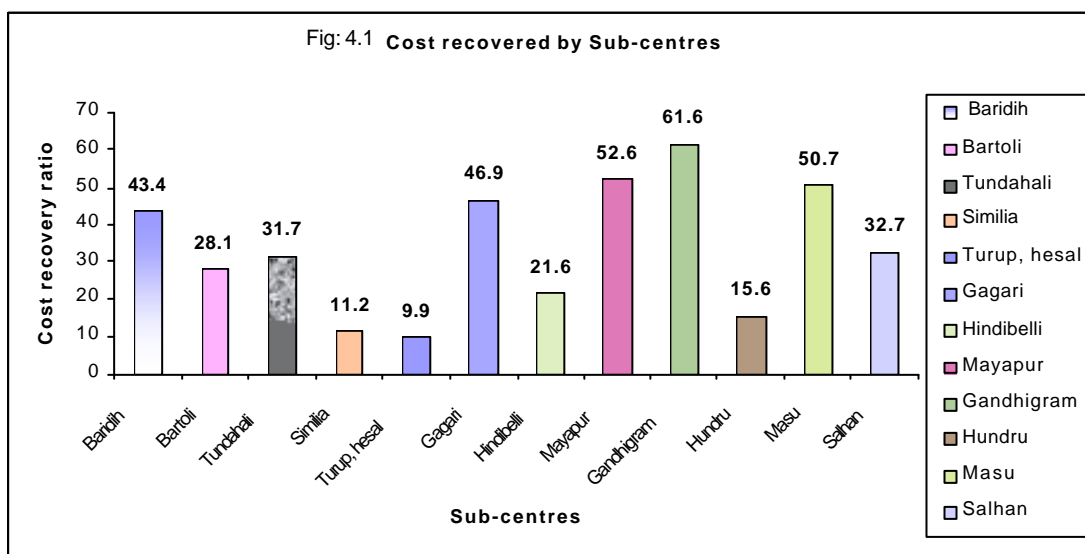
Sustainability of the project activities and services was an important consideration. It envisaged cost recovery as a key approach, in addition to other issues such as capacity development, community ownership and continued support from the existing health system. The project aimed at 65 percent cost recovery in the rural hospitals and 35 percent in the sub-centres. The health services were available by paying nominal/ subsidized user charges

To increase the motivation level of the health workers, some performance-based reward criteria were introduced. Therefore, for most of the services and contraceptive social marketing, the worker had a share in the income. To sustain the activities, part of registration fee went to the *swasthaya samiti*. The norms were prescribed for the share of the health workers and cost transfer to the *samiti*.

#### 4.1 Cost Recovered by the Sub-Centres

The cost recovery analysis was done only for 12 sub-centres. The expenditures incurred by a sub-centre included only the variable cost i.e. consumables, and human resources i.e. health workers' salary.

Cost recovery was measured as a ratio of expenditure to income. The overall cost recovery, being 31.3 percent, was close to the targeted 35 percent. Five sub-centres (Baridih, Gagari, Mayapur, Masu and Gandhigram) recovered the cost even more than 40 percent. The other two sub-centres closely reached the target. However, there were some sub-centres that could not perform well (Fig. 4.1).



A comparative analysis of the original and the new sub-centres revealed that the new sub-centre were able to recover 35.9 per cent cost whereas the original sub-centres could recover only 9.9 percent cost.

A comparison between the cost recovery of the sub-centres of two blocks was made. The results revealed that the centres of Ormanjhi block did better (36.7 percent) than the Angara block (27.6 percent).

The average per patient cost recovery was 31.0 percent. However, further analysis revealed a wide variation among the sub-centres. The cost recovery was as high as 61.7 percent at Gandhigram and as low as 15.6 percent at Hundru.

#### 4.2 Cost Recovered by the Rural Hospitals

The cost analysis was done for each hospital taking into consideration the cost of transportation, equipment, consumables, human resources, training and documentation.

The rural hospitals could not recover the cost as targeted (65 percent). On an average the cost recovery was 47.6 percent, thus leaving a gap of 17.4 percent points. The cost recovery was 50.4 percent in Narayan Soso hospital and 45.3 percent in Rukka hospital.

However, if the cost of human resources is taken out from the analysis, the cost recovery as high as 97.1 percent in Narayan Soso hospital and 89.1 percent in Rukka hospital. Thus, by and large, the hospitals have been able to recover the cost as per the objective of 65 percent.

Per patient expenditure was Rs 244.1 in the rural hospitals. The analysis shows that Rs. 116.2/- was recovered against the recoverable cost of Rs. 158.7 per patient. The cost recovery per patient was better at Narayan Soso hospital than Rukka hospital.

**Table 4.1: Analysis of expenditure incurred and income per patient at KGVK rural hospitals (April 2002-January 2003)**

	Total number of OPD registered cases	Expenses incurred per patient (Rs.)	Desired Outcome (Amount @ 65% of per patient expenses in rupees)	Actual Outcome (Income per patient in rupees)
Rukka Hospital	2529	332.40	216.06	150.60
Cost recovery ratio				69.7
N Soso Hospital	3713	183.90	119.55	92.8
Cost recovery ratio				77.6
Total	6242	244.1	158.7	116.2
Cost recovery ratio				73.2

**Table 4.2: Cost recovery analysis of rural hospitals (April 2002-January 2003)**

Ormanjhi (Rukka Hospital)				Angara (Narayan Soso)				Total		
Expenses		Income		Expenses		Income		Expenses		Income
Transport	110,000.00	Registration OPD	16,370.0	Transport	110,000.00	Registration OPD	16,320.0	Transport	220,000.00	
Equipment	99,670.00	Registration IPD	21,622.0	Equipment	99,670.00	Registration IPD	5,252.0	Equipment	199,340.00	
Consumables	92,612.62	General Ward	5,375.0	Consumables	27,027.22	Operation	7,750.0	Consumables	119,639.84	
Human resource (MO/ doctors)	213,450.00	Drugs and Medicines	82,736.1	Human resource (MO/ doctors)	188,270.00	Drugs and Medicines	117,594.0	Human resource (MO/ doctors)	401,720.00	
Human resource (paramedical and other staff)	200,040.00	Diagnostic tests	28,384.0	Human resource (paramedical and other staff)	139,990.00	Diagnostic tests	54,805.0	Human resource (paramedical and other staff)	340,030.00	
Overheads	117,604.76	Social Marketing	3,573.5	Overheads	110,554.00	Social Marketing and Others	68,160.0	Overheads	228,158.76	
Training	5,800.00	Training	1,44,000.0	Training	5,800.00	Training	70,000.0	Training	11,600.00	
		Others	78,810.0							
Documentation	1586.00			Documentation	1586.00			Documentation	3,172.00	
<b>Total</b>	<b>840763.38</b>		<b>236,870.6</b>	<b>Total</b>	<b>682,897.22</b>	<b>Total</b>	<b>274,484.00</b>	<b>Total</b>	<b>1,523,660.60</b>	<b>7,25,354.6</b>
Cost recovery ratio	45.3			Cost recovery ratio	50.4			Cost recovery ratio	47.6	
Cost Recovery Excluding Human Resource Cost	89.1			Cost Recovery Excluding Human Resource Cost	97.1			Cost Recovery Excluding Human Resource Cost	92.8	

## Chapter 5

### SUMMARY AND CONCLUSION

The project “Enabling the expansion and sustainability of integrated RCH/infectious diseases outreach services through skill upgradation, capacity building and women’s empowerment” was implemented by the Krishi Gramin Vikas Kendra (KGVK) with the support of CEDPA for a period of one year in Ranchi District of Jharkhand State. The project mainly aimed to provide integrated quality and sustainable reproductive and child health services along with other health services to the population residing in the project area. The project envisaged expansion of services to about 50,000 population. It also envisaged reactivation of additional seven sub-centres and their strengthening with equipment and human resource. The Indian Institute of Health Management Research was assigned to undertake an end-line evaluation project to assess whether the project had achieved the objectives for which the KGVK was supported.

The KGVK has a strong presence and has already been working in the area, providing health services to a population of about 16,000 through six sub-centres. The end-line project evaluation has revealed that the project was successful in expanding the outreach and coverage of the integrated reproductive health services as per the objectives laid down. Seven additional sub-centres were activated and equipped with necessary furniture, equipment, medicine and manpower in the early stages of the project. The non-functional sub-centres were made functional.

The project also made a unique experiment in training and recruiting local health workers to manage sub-centres and provide health services. The presence of health workers and strengthening of the sub-centres brought an incredible change in the access and availability of integrated reproductive health services in the area. The health workers were involved in carrying out the base-line survey, which not only enabled them to understand the health situation and status of utilization of services, but also enhanced their motivation and ownership to achieve the given objectives. A series of efforts were made to build the capacity and the skills of health workers to provide quality services. The impact of training was evident, as there was an increased role perception and skills to perform the required tasks.

The project has successfully maintained a consistently high contraceptive prevalence rate through promotion and counseling for various methods of contraception, especially spacing methods. Expansion of services and availability of health workers has facilitated improved access and availability of contraception methods.

The impact of the project was visible on reproductive health services, especially antenatal care, that included regular check ups during pregnancy, two doses of tetanus toxoid, and the distribution of iron folic acid tablets. The project has successfully achieved its objectives by providing these services to more than 75% of the pregnant women in the project area.

The impact of the project on immunization services was significant. About 80 per cent of the children in 12-23 months of age group had received complete immunization. Similarly, the coverage with Vitamin-A was also high.

The most important issue that the project has addressed is that of sustainability. It has shown that the people were willing to pay for good quality services and the cost recovery was possible and could be a plausible alternative of financing the healthcare.

Cost recovery mechanism was developed at the rural hospitals and sub-centres. It was heartening to note that the cost recovery from the users of the services was initiated. About one half of the sub-centres were successful in cost recovery almost up to 35 per cent as per the objectives. Similarly, at the rural hospital, the cost recovery was about 48 per cent and it would increase to above 93 per cent if the salary of the health workers and medical doctors were excluded. In addition to cost recovery, involvement of the community and sustained motivation of the staff is crucial. The project was successful on both the accounts. This is evident especially in the case of the repair and construction of the sub-centres and their maintenance. The project has demonstrated that non-governmental organizations can play a significant role in expanding the outreach and improve the access and availability of the services.

Lastly, a word of caution. The period of one year is too short to demonstrate success of alternative approaches and sustainability of health services. Much more time would be needed to demonstrate the success of cost recovery mechanism and continued participation of the community in service delivery at the village level. The real test would be in scaling up the experiment.

### **The Major Strengths of the Project**

- The project was conceived and initiated by an experienced team;
- The project staff (health workers) belonged to the area of operation and initially trained by KGVK itself;
- Training inputs came from CEDPA; and
- The organization was able to create awareness of the project and its activities in the area.

### **The Major Impediments of the Project**

- Lack of staff at supervisory level other than the medical doctors;
- More focus on the main village where the centre was located; and
- Lack of leadership and management skills among the staff.

The fact that six sub-centres have been reactivated and are being used is an achievement. Seven new centers were established, thereby doubling the services available. In general, it can be concluded that there has been an increase in the utilization of the facilities during the project.

### **Suggestions and Recommendations**

- It is suggested that the training programmes may be conducted to develop leadership and management skills of the medical officers and the other key officials of KGVK. One of the responsibilities of the medical officers is to manage the rural hospital. The medical

officers are trained in technical aspects but not on the management issues. An orientation of the management may enhance the hospitals' efficiency and effectiveness.

- There is a further scope for active involvement of the *Swasthaya Samiti* members in the activities conducted by the KGVK, for example, as depot holders to the hamlets, organising IEC activities, etc, so that their own notion of sub-centres may change from place of treatment of illness and drug distribution to the place where other services reproductive health and family planning services are available. Efforts must be made at changing this mindset of the members of the *samiti*.
- Monthly meetings conducted under SHGs may be utilized effectively. It was observed that the SHG members conduct monthly meetings regularly but linkages with the project were weak. The project staff may utilize this opportunity for health related activities such as health talks, CSM, etc.
- The health workers may increase their visits to the area, especially to the hamlets. Most of the activities of the health worker were centred on the health centre and therefore, women living in the hamlets were less aware of the services provided by the health worker.
- Besides providing services, quality of care needs to be focused on completeness of antenatal care, regularity of contraceptive (spacing methods) users, RTI/STI treatment, follow up services, etc.
- It is suggested that the health workers may devote their time in managing the information by keeping registers, daily diaries and *pariwar* cards. The same can be made more effective by keeping uniformity in records at each centre and also by apprising the health workers of its purpose.

## ANNEX

### PROJECT RELATED INDICATORS AND ACHIEVEMENTS

**PRI# 1: Thirteen sub-centres operational and providing a full range of FP/RCH and infectious disease services**

	Original/ old (n=369)	Additional /New (n=658)	Combined (n=1027)
Number sub-centres operational during the EOP survey	6	7	13 (objective achieved)
% Women aware of the project	84.3	76.6	79.5
% Women aware of health services provided by the centres	75.1	66.7	69.7
Family planning	49.9	45.3	46.9
Safe motherhood	67.5	62.5	64.3
Child health	56.6	48.8	51.6
Infectious diseases	0	0.3	0.2

**PRI# 2: 70% of eligible couples/ families visited by a health worker and or village volunteer within the last 3 months**

	Original/ Old (n=369)		Additional /New (n=658)		Combined (n=1027)	
	DO*	AO**	DO*	AO**	DO*	AO**
% Women visited by HW at home during the last 3 months	70.0	14.9	70.0	16.1	70.0	15.7
% Women visited the sub-centre during the last 3 months	70.0	16.5	70.0	16.7	70.0	16.6

**PRI# 3: 35% CPR for modern contraceptive methods in the original 19 villages and 5 percentage points above the baseline for the additional 21 villages**

	Original/ old (n=2,746)		Additional /New (n=4,722)		Combined (n=7,468)	
Base-line census CPR (modern methods only)	44.9		45.2		45.1	
Current CPR	Original/ old (n=369)		Additional /New (n=658)		Combined (n=1027)	
	DO	AO	DO	AO	DO	AO
Modern methods only	35.0	42.0	45.2+5=50.2	40.4	45.1+5=50.1	41.0
Any method	35.0	44.2	45.2+5=50.2	44.7	45.1+5=50.1	44.5

\*DO=desired outcome; \*\*AO=actual outcome



**PRI# 4: A wide range of modern contraceptive methods available including injectables, OCPs, condoms, IUDs, NSV, minilap, LAM and SDM**

Method-wise Current CPR (Combined)						
	CPR before 10 months in the project area			Current CPR in the project area		
	Original/old (n=2,746)	Additional/New (n=4,722)	Combined (n=7,468)	Original/old (n=369)	Additional/New (n=658)	Combined (n=1027)
Condoms (CPR)	3.7	2.2	2.8	2.4	1.5	1.8
Oral pills (CPR)	3.0	3.5	3.3	4.1	2.9	3.3
IUDs (CPR)	0.4	1.3	1.9	1.3	0.9	1.1
Tubectomy (CPR)	37.1	37.4	37.3	33.6	34.6	34.3
Vasectomy (CPR)	0.5	0.7	0.7	0.3	0.4	0.4
Injectables (CPR)	0.0	0.0	0.0	0.0	0.0	0.1
Natural methods (CPR)	0.4	1.8	1.3	2.1	4.2	3.5

**PRI # 5: No stockout of OCPs, condoms, or ORS in last three months**

The evaluation showed that each sub-centre had an adequate and regular supply of OCPs, CCs and ORS packets. The doctors also carried the same with them during their visit.

**PRI #6: 75% of pregnant women received basic antenatal care (3 check-ups, 2 TTs, and provision of 100 IFA tablets) in the existing 19 villages and 50 % in additional 21 villages**

	Original/ old		Additional/New		Combined	
	Desired Outcome	Actual Outcome	Desired Outcome	Actual Outcome	Desired Outcome	Actual Outcome
Per cent women who had delivered their child during the reference period	17.9 (66)		14.9 (98)		16.0 (164)	
Per cent women who had delivered their child and received any ANC services during the reference period	75.0	87.9	50.0	83.7	50.0	85.4
Per cent women who had delivered their child and received complete (#checkup, 2 TT, 100 IFA) ANC services during the project period	75.0	4.5	50.0	6.1	50.0	5.5
Check-up	75.0	63.6	50.0	65.3	50.0	64.6
Project staff contribution (source)	23.3		42.2		34.9	
≥2 TTs	75.0	83.3	50.0	80.6	50.0	81.7
Project staff contribution (source)	21.8		31.6		27.6	

>89 IFA consumed	75.0	10.6	50.0	19.4	50.0	15.8
Project staff contribution (source)	20.5		20.5		28.7	

**PRI #7: 40% of deliveries attended by a trained/ skilled person in the original 19 villages and 10 percentage point increase above baseline in additional 21 villages**

	Original/ old		Additional /New		Combined	
	Desired Outcome	Actual Outcome	Desired Outcome	Actual Outcome	Desired Outcome	Actual Outcome
Per cent women who had delivered their child during the project period	17.9 (66)		14.9 (98)		16.0 (164)	
Per cent women who had delivered their child with the help of a trained/ skilled attendant	40.0	50.0	54.2+10=64.2	43.9	40.0	46.3

**PRI #8: 80% of children aged 0-5 years fully immunized in the existing 19 villages and 10 percentage point increase in the additional 21 villages**

	Old (n=239)		New (n= 488)		Combined (n=727)	
	DO	AO	DO	AO	DO	AO
Percent of children aged 12-60 months fully immunized (excluding Vit. A)	80.0	82.4	45.5+10=55.5	81.8	80.0	82.0
	Achieved		Achieved		Achieved	
Percent of children aged 12-60 months fully immunized (including Vit. A)	80.0	77.4	45.5+10=55.5	74.0	80.0	75.1

**PRI #9: 75% of cases of childhood diarrhea treated with ORS in the existing areas and 10 percentage point increase in the additional 21 villages**

	Old		New		Combined	
	DO	AO	DO	AO	DO	AO
Number of children aged 0-5 years	n = 309		n = 587		n = 896	
Percent children who had an episode of diarrhea during the last 15 days prior to EOP survey	14.9 (46)		11.7 (69)		12.8 (115)	
	Achieved		Achieved		Achieved	
Percent children who had episode of diarrhea during the last 15 days prior to EOP survey and treated with ORS	75.0	34.8	75.0	30.4	75.0	32.2
Project staff contribution	37.5		14.3		24.3	

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**PRI #10: 65% cost recovery in the 2 rural hospitals and 35% in the 13 sub-centres**

	Rural Hospitals	Sub-centres (considering 12 sub-centres only)
% total cost recovered	47.6	31.3
Cost recovered per patient	73.2	31.0

**PRI #11: Consortium of industries for the prevention of HIV/AIDS established, plan of action developed and activities initiated**

The consortium is active and presently working on:

- IEC material
- Resource mobilization
- Publicity
- Social marketing