Best Practices in area of Tribal Health

PRESENTED IN NATIONAL WORKSHOP ON
TRIBAL HEALTH - SEARCH GADCHIROLI
OCTOBER 2015

MINISTRY OF HEALTH & FAMILY WELFARE
Best Practices in Area of Tribal Health

PRESENTED IN NATIONAL WORKSHOP ON TRIBAL HEALTH - SEARCH GADCHIROLI, OCTOBER 2015
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Introduction

Ministry of Health and Family Welfare, Govt. of India constituted an Expert Group on Tribal Health, in 2014. The Expert Group organized a national workshop on “the best practices in tribal health care” to bring together the best practices from across the country, as a beginning of the Expert Group’s search for solutions’, which was hosted by SEARCH, Gadchiroli from 11 to 13 October, 2015, at Shodhagram (SEARCH HQ) Gadchiroli, Maharashtra.

The workshop was aimed at sharing of the best practices and examining them to identify; a) the practices with the potential for scaling up, and b) learnings for the tribal health care policy in India. The 53 participants from all over India, selected from the government health care programs in states, the civil society and the academic/research organizations participated in the workshop. Twenty three nationally selected best practices were presented and discussed. The selected “Best Practices” were meant to demonstrate an effective method/approach or solution which would become a candidate for scaling up to solve some of the critical problems in tribal health care.

The parameters which were used to select the best practices were –

1) A specific important problem is addressed. The problem may be a disease, a health indicator (IMR, MMR etc) or a barrier to providing health care in tribal areas (human resource, outreach, community participation, health education, community based care, secondary care, transport, acceptance by the tribal people, coverage, monitoring, financing, etc),

2) It demonstrates a distinct method or a component,

3) Demonstrated feasibility of implementation,

4) Proven impact,

5) Scalability.
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<th>Best Practice</th>
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Problem Statement

- Prevalence of Blindness (1.8 %)
- Visual Impairment (8.1%)
- High prevalence of both blindness (60%) and moderate visual impairment (87%) in rural areas. Cataract and uncorrected refractive errors were responsible for it.
- High barriers to utilization of eye care services: accessibility, affordability and availability
- Vision of majority of visually impaired and blind can be restored by a simple pair of glasses and cataract surgery
- High proportion of persons who could benefit from attending the outreach services do not participate in them

The LVPEI Model of Eye Care Delivery

- Infrastructure
- Training of Human Resource
- Standard Operating Protocols
- Cross Subsidy
- Decrease in prevalence of blindness and VI
- Rehabilitation of irreversible blind
- Community Empowerment
- Sustainability
**Programme Description**

Creation of an Ideal Rural Eye Care Centre. Key components of programme -

- Infrastructure
- Training of Human Resource
- Building Standard Operating Protocols
- Cross Subsidy

**Core Activities of the Institute** -

- Service Delivery
- Education
- Research
- Consultancy
- Advocacy

**Programme Goal**

Vision Centre aims to eliminate avoidable blindness and visual impairment by providing affordable and quality eye care to rural populations

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**Prevalence and Causes of Visual Impairment (above age of 40 years)**

*APEDS: 1998-2000

*RAVI: 2014 (unpublished data)
Performance of Centre

16 centres established between August 2003 to June 2008

<table>
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<th>Indicator</th>
<th>Performance</th>
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<tr>
<td>No. of people examined (OP)</td>
<td>300,583</td>
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<tr>
<td>No. of glasses prescribed</td>
<td>105,477 (35% of total OP)</td>
</tr>
<tr>
<td>No. of glasses dispensed</td>
<td>92,134 (31% of total OP)</td>
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<tr>
<td>No. of people referred to higher level</td>
<td>59,770 (20% of total OP)</td>
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*Spectacle Conversion rate: 87% “Total OP without Visual Impairment: 45%*

Key elements of Vision Centre – Permanent Primary Eye Care Facility for 50,000 population (500-600 sq. ft. area)

- Walk in free screening centre
- Runs 5.5 days / week
- Half day community visit every week
- Basic undilated eye examination and retinoscopy
- Provision of low cost spectacle
- Recruitment of local staff, their training at tertiary care centre

Programme Outcomes

- Decrease in prevalence of blindness and Visual Impairment (VI)
- Rehabilitation of irreversible blind people
- Community Empowerment
- Sustainability

Financial Implications

One time fixed cost of vision centre – Rs. 8 Lakh.
Average cost to patient – Rs. 178 + / - 48 (compared to Rs. 366+/- 48 in nearby private clinics)

Scalability

Support provided by the organisation’s tertiary care centre and the referral linkages are critical to the success of the programme. So the scalability of the interventions is closely linked to such support systems.
Problem Statement
Occurrence of unknown disease characterised by knock knee of all children <20 Years in a village (Tilaipani) of district Mandla. Differential diagnosis in initial phases – Sickle Cell Osteopathy, Endemic Ricket, Fluorosis. Cases found:

Village Tilaipani -
- Genuvalgum – 52% (below 20 years of age)
- Dental mottling – 74%
- Fluorine in Water – 9.2 – 10.8 ppm

Village Hirapur -
- Genuvalgum – 6% (below 20 years of age)
- Dental mottling – 56%
- Fluorine in Water – 0 to 13.5 ppm

Programme Goal
To correct the deformities and reduce the micronutrient deficiencies

Programme Description
Steps Recommended to state govt. and subsequently implemented in the villages were -
- Alternate water source
- Closure of all contaminated hand pumps
- Surgical shoes for children of < 10 years age
- Supplement Calcium, Vitamin C, D3, Iron
- Dietary Counselling and health education
- Initiating ICDS activities

Average consumption of foodstuffs gm/day in Mandla, Central India (1995) (n=48)

Alternative water supply in affected villages of Mandla, 2004-05

ICDS Activities in Affected villages  Dismantled hand-pumps
Programme Outcomes

Effect of intervention on Fluorosis in two villages of Mandla after 5 years of programme in Village Tilaipani -

Genuvalgum – 2.6 % (below 20 years age)
Dental mottling – 70 %
Fluorine in Water – <1 ppm
Urine Fluoride – 9.8% (baseline value was 41%)

Financial Implications

Cost of a subsequent intervention in District Seoni based on same model was Rs. 27 Lakh.

- Scalability - Same model was implemented by UNICEF in Dhar and Jhabua through NGOs in 2006-07. Independent evaluation showed similar results
- UNICEF included it in their internal learnings and subsequently trained 13 country teams on this model
- INREM foundation of TATA Trust worked in Jhabua with same model, and same results were seen.
- Concept was included in National Programme for Prevention and Control of Fluorosis (NPPCF)
Problem Statement

Malaria is among the major health problems for the area along with Tuberculosis, Viral Diseases, Filaria, Scabies, Diarrhea, HIV, Haemoglobinopathies, Malnutrition, Fluorosis, and Hypertension.

Malaria has a perennial transmission in the area. The dominant variant found in the area is Plasmodium Falciparum. P. Vivax is also found commonly, and P. Malariae is found as a rare occurrence. Two highly efficient vectors are, Anopheles culicifacies and Anopheles fluviatilis.

The risk factors that contribute to the high occurrence of Malaria in the area are, 37% geographical area being under forest, and inaccessible terrain. The main inhabitants of the area are Baiga tribes.

The district contributes to 12% of the burden of Malaria in the state, through it has only 1% population of the state. In 2009, its statistics related to Maparia were; SPR- 27%, Pf% 87%, Spleen Rate 47%, IPR (<1 Yr.) 40%, CPR (<5 Yr) 45%.

Programme Description

The goal of the programme is, a) To control Malaria in Baigachaak with an aim to accomplish Zero indigenous malaria transmission in Dindori district, so that it will not remain a major public health problem and will serve as a guide for Malaria Elimination programmes, b) Develop evidence based strategy for elimination of Malaria from highly endemic tribal areas of the state, and c) Strengthen existing health systems. The programme duration was 5 years.

The interventions of the programme included; a) Indoor residual spray (IRS) using Alphacypermethrin, b) Long lasting Insecticide Trated Nets (LLINs), c) Robust surveillance using RDT and ACT, d) Intensive IEC in collaboration with a Kolkata based NGO (funded by Ministry of Tribal Affairs - MOTA).

Training Workshops jointly with NGO-Bangla Natak Dot Com, Kolkata

Organized 36 Training Workshops with students (Total in the field)

- Trained on survey techniques
- Trained on tools of communication
- Trained on theatre based methods
- Saha KB. et 012015. IJ MR, 141 N., 576-583
Extensive Health Education was undertaken through IEC campaigns in the district under the intervention, focussing on Promotion of Preventive Measures, and generation of demand for health services. The IEC campaign engaged; 235 local school going children (class 8-12), 47 local unemployed youth as village facilitators, 3 block monitors, and 1 field coordinator. Total 42 schools were enrolled in the process. 36 Training Workshops were conducted in the district with students (total 84 days of workshop). The workshops focused on survey techniques, tools of communication, and theatre-based methods for conducting IEC in the community.

Programme Outcomes

Major reduction in Malaria prevalence was recorded. From a level of 36% reduction in 2010, it went up to 89% in 2014.

Slide positivity rate came drastically – from 27% in 2009, it came down to about 4% in 2014. Similarly, Slide falciparum rate also came from 24% in 2009, to about 3% in 2014.

Major reductions were also recorded in % of enlarged spleen. From a level of 49% people with enlarged spleen in 2009, it came down to 5% in 2014.

Yearwise man hour density of Malaria vectors also came down from the level of 37 of Total Anophlines in 2009, to 8 in 2014. Sporozoite rates also came down. For An. Culicifacies it changed from 1.2 in 2009 to 0 in 2014, and for An. fluviatilis it changed from 0.5 in 2009 to 0 in 2014.
Financial Implications

This intervention was supported by MOTA funds. NGO was engaged for its implementation.

Scalability

The scalability of the intervention is linked to the factors that contributed to its success and those factors that hindered it. Unwillingness of the staff to work, and limitations of mobile network, and the public transport in the area were faced as challenges. Strengthening and capacity building of the frontline workers (ASHA, ANM/AWW), and organization of sensitization camps at public places were found to be positive factors in the intervention.

The conditions necessary for the successful implementation of the interventions were recorded as; Robust surveillance, Prompt diagnosis, and treatment, Increase in ground level health worker, scaling up of LLINs, RDTs & ACTs, Need based IEC / BCC, Intersectoral coordination, and supply chain management.
Problem Statement

Malaria incidence in India accounted for 76% of cases in South East Asia region. In India, 80% of cases come from the 22% population in high transmission, tribal, hilly and inaccessible areas. Of these, Odisha, reported 26% of Malaria cases and 85% of Pf cases.

Odisha is particularly endemic for Falciparum malaria. Surveys done in from 2001 to 2010 showed a Child Parasite Rate of 38.2% (of the 21845 children screened, 8340 were found Malaria positive in 5 districts).

The most vulnerable groups for severe malaria are children (under 5 years age group), and pregnant women, especially Primi-gravidae. The region also ranks highly in the state for Child Malnutrition and Child Mortality. Insights from the years of community health work in the region showed that, reduction of Childhood malaria will significantly reduce Child Malnutrition and Child Mortality, besides other improvements in their quality of life.

It has also been recorded that Malaria, is a major killer in tribal parts of Odisha, and causes morbidities among tribals, especially children. *Anopheles Fluviatilis* is the common vector which breeds in flowing water, making it difficult to control. Inaccessible areas are the most vulnerable, with high mortality and suffering to people. Malaria also contributes to socio-economic distress in these endemic areas.

Programme Description

In the initial phase of the programme, active screening of children was conducted through 50 camps, between June to Dec 2010. Through this screening, 59% of children in under 5 age group, were found positive for Malaria. The prevalence rates were found highest in remote hill villages. Seven small hilly villages had 100% positivity among children.

The program aimed at reduction of Point Prevalence of Malaria by 25% (as assessed by blood tests in children under 5 years), and reduction of Fever Deaths by 25% (as reported in household surveys or

<table>
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<th>Y2012</th>
<th>Y2013</th>
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<tr>
<td>FABR (25000 in Y12 &amp; 13)</td>
<td>1636</td>
<td>4863</td>
<td>3944</td>
</tr>
<tr>
<td>DAPTA (18000)</td>
<td>2508</td>
<td>3172</td>
<td>1508</td>
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<tr>
<td>SWATI (27000)</td>
<td>5106</td>
<td>4904</td>
<td>4680</td>
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**Fig 3: Decline in Total Fever Cases (All)**
community-based MIS). The interventions set out to establish 'A people centred, scientifically sound, locally relevant Malaria control strategy that aims to empower individuals and communities with the knowledge, skills and motivation needed to protect themselves from and to control Malaria, and facilitation of access to the tools needed for the same'.

The intervention focused on a few key strategies and implemented a no. of activities under each. The first strategy focussed on Education for Empowerment, the second one was – Saving Lives, Decreasing Suffering and reducing Parasite Load, the third strategy was – Reduction of Vector Density, fourth strategy

- Fever deaths are difficult to establish except in hospital admission or by verbal autopsy.
- Govt data usually underestimates Malaria-deaths, often talks only about cerebral malaria deaths.

### Fever deaths declined

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<th>Y2012</th>
<th>Y2013</th>
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<tbody>
<tr>
<td>DAPTA</td>
<td>27</td>
<td>35</td>
<td>6</td>
</tr>
<tr>
<td>FARR</td>
<td>18</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>MITRA</td>
<td>46</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>SWATI</td>
<td>19</td>
<td>6</td>
<td>3</td>
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</table>

### Decline in % of U5 children with Malaria-parasite in blood

- A major success of the program
- Mal-Mal camps, with personal protection (Nets + BCC) effective.
was focused on Behavioural Change and use of Personal Protection Measures, and the fifth strategy was aimed at ‘Organisational Capacity Building, Monitoring and Evaluation for Measuring & Sustaining Change’.

The education campaign included knowledge on Malaria (what is Malaria, how it spreads, what to do after infection, and preventive measures) and facilities available for malaria control. The second strategy focused on encouraging use of government services, provision of presumptive CQ-SP through volunteers, and CQ-SP, or blood test with RDT and treatment with ACT by staff, as well as the referral support for severe cases.

The interventions also focused on camps for active screening, for under 5 children, and antenatal mothers. Efforts for vector control included, awareness building for breeding site reduction, weekly dry days, and IRS, and promoting Larvivorous Fish. Training and capacity building of the health workers and FLWs (ASHA & AWWs), and VHSNCs – the community organization called GKS in the state, was conducted extensively.

Simple community-based management information systems on select health indicators were also set up.

The programme was implemented with five collaborating NGOs, with each covering 50 villages.

**Programme Outcomes**

In the programme intervention (implemented by the NGO) which had pre-dominantly tribal and dalit communities, Malaria Parasite Rate in children, in under 5 age group, came down from 59% in 2010, to 16% in 2014, the under 5 mortality rate (per 1000 live births), reduced from 295 to 93, and Fever Death Rate (per 1000 population), reduced from 71 to 1.8. Similarly, major reductions in key parameters were seen in intervention areas of other four NGOs.

**Financial Implications**

The project cost was estimated to be Rs. 235/ person/year, which translated to total cost of Rs. 23.5 Lakh per year for coverage of a population of 10,000 (which includes HR, transport, materials etc.).

**Scalability**

The intervention was based on the Community Based Malaria control programme, that was implemented in that area, by one of the collaborating NGOs since last 19 years. This NGO also conducted training for many other NGOs and civil society networks between 1996 to 2009.

This intervention has also been implemented and scaled up in 630 villages of 4 districts of Odisha, between 2010 to 2015, by Tata Trust Partners Network.

In 2015, Health and family Welfare Dept. of Govt. of Odisha, and NVBDCP programme launched a programme to upscale this intervention in 8 districts.
Problem Statement

- One third of the children are underweight, which means they go to bed hungry every night
- High Malnutrition is prevalent in this age group
- Long term effects are, reduced learning ability and work capacity, leading to poverty trap
- No one to feed these children frequently. They can’t eat themselves.
- Where food is offered, portion size is small.
- Illnesses leads further to poor eating – it leads to malnutrition which leads to further illnesses
- Extreme poverty and low purchasing capacity of parents further aggravates it

Some key Malnutrition data (India’s Rapid Survey for Children 2013-14)

<table>
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<tr>
<th>Category</th>
<th>India</th>
<th>Chhattisgarh</th>
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<tbody>
<tr>
<td>Stunted</td>
<td>38.8</td>
<td>43</td>
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<tr>
<td>Severely Stunted</td>
<td>17.4</td>
<td>16.4</td>
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<tr>
<td>Wasted</td>
<td>15</td>
<td>12.9</td>
</tr>
<tr>
<td>Severely Wasted</td>
<td>4.6</td>
<td>2.4</td>
</tr>
<tr>
<td>Under weight</td>
<td>29.4</td>
<td>33.9</td>
</tr>
<tr>
<td>Severely underweight</td>
<td>9.5</td>
<td>9.9</td>
</tr>
</tbody>
</table>

Programme Description

Fulwaris, Hamlet based creches were established

- A Caretaker is selected by village community
- One per ten children (2 workers for 13-20 children)
- Several creches in a large village
- Opens 8 AM to 4 PM.
- Health Care by Village Health Worker
- Basic Training in child nutrition or health is given to Phulwari workers
- 83 creches in 38 villages – 1066 children
- Food Supplementation at Fulwari centre – Sattu daily – cereal – pulse – oilseed mix 60 gm / child / day
Best Practices in Area of Tribal Health

Hand washing

Adding oil to food

A younger child being fed

Older children feed themselves

- Khichdi daily – rice / daal mix (5:1) 125 gm rice
- Eggs thrice a week
- Oil supplementation – 10 ml / child /day
- > 900 K Cal + 22 gm protein / day

Also provision for:
- Iron supplementation – daily
- Albendazole twice an year
- Toys for cognitive learning
- Growth monitoring every month
- Early Child Education

Caretaker : Child ratio - to be not more than 1: 8-10

Programme Outcomes
- Positive community response
- Children now eat more even at home
- Children wash hands regularly, even at home before meal
• Older siblings going back to school
• Improvement in Nutritional Status
• Long term effect of Malnutrition on height has not shown any change. Stunting persists.
• Weight for age and weight for height have significantly improved (Status monitored using WHO Anthro Software)

Financial Implications
Cost is Rs. 27.68 / child / day for food. Wages – Rs. 3000 per month for supervision, logistics, and medicines.
• Scalability - In Nov. 2012, the programme was scaled up – through an NGO (Public Health Resource Network - PHRN) - 148 creches established with 1552 children
• Madhya Pradesh and Chhattisgarh, launched Anganwadi cum creches (in 5% AWCs) on pilot basis. Being replicated in Bihar, Orissa & Jharkhand by NGOs.

Impact on Wasting
Wasting Status of Cohort: 4-6 months
(n87)
Problem Statement

Key challenges identified were, Inadequate access of quality food items among families, poor maternal nutrition, lack of time for child feeding, recurrent infection, the inadequate reach of health workers to under 3 years children, ICDS resources more focused on 3-6 years old.

Programme Description

Fulwari intervention is a community-managed health and nutrition center. Focused on feeding and care of under 3-year-old children, pregnant and lactating women. It aims to prevent infections in children, ensure early detection and cure; by organized daycare through habitation based collective of mothers, promoting household / community level production of diverse foods.

No paid worker for working in Fulwari, it is managed and run by the group of mothers and 2 mothers volunteer each day to run the Fulwari and take care of children. All decisions regarding the Fulwari are taken by the group. Group manages funds that are made available for running the centres from Panchayats. Each Fulwari covers 5-20 children depending on habitation size. It runs on all days, 6-7 every day hours depending on timings of working mothers, at a space provided voluntarily.

Programme Outcomes

Fulwari is highly accepted in the community and among mothers, Hygiene and feeding practices improved, it made it easier for ANM and Anganwadi workers to reach out to pregnant women and young children, it helped in reducing the episodes of illness and child mortality, which led to weight gain by pregnant women and improvement in birth weights. Growth monitoring also improved also improved in the community.

Chhattisgarh Interim Assessment Cohort Study shows that 64% of severely underweight children enrolled in Fulwari, were able to come out of the severely underweight category. The low birth weight incidence has come down from 25.5% to 13.9% for newborn to pregnant women enrolled in Fulwari. The second round Survey reported a 24% and 38% reduction in the overall and severe underweight rate respectively.

Financial Implications

An average budget of Rs. 50,000 per Fulwari is allocated by State Government. Rs. 6 per child per day and Rs. 15 per pregnant woman per day for food were provided by Gram Panchayat and Fulwaris respectively. The state government increased allocation to Rs. 30 Crores in the year 2015-16 to allow expansion into 6000 Fulwaris.

Scalability

It was replicated across 19 districts of Chhattisgarh and became a state scheme in 2013-14. A total of 2850 Fulwaris are operational presently, covering 85 tribal blocks of the state with an enrolment of around 35000 children and 16000 pregnant/lactating women,
Fulwari Volunteer Duty Charts

21 Best Practices in Area of Tribal Health
Problem Statement

According to Annual Health Survey 2011-12, the IMR at Jashpur was one of the highest in Chhattisgarh at 64 and U5MR was at 100. As per the protocol, Children with Severe Acute Malnutrition (SAM) with medical complications need to be admitted to Nutritional Rehabilitation Centres (NRCs) and without medical complications to be managed through a community-based program. However, in reality, non-SAM and SAM children without medical complications were being admitted to NRCs. The required number of beds is huge but availability is limited. Specialized care in NRCs was a challenge and feeding protocol training was needed.

Programme Description

The defined problem was addressed by Health Wednesday at Jashpur through accurate screening of SAM children with medical complications by medical officers (MO) for NRC referral and by providing regular and appropriate medical assistance and counseling to other malnourished children and mothers. Under the program Mobilization of malnourished children and their mothers were mobilized to CHC/PHC; Free Health Checkup was provided by MO/Rural Medical Officer (RWA)/ Ayurvedic MO at 8CHCs and 35 PHC across the district; Free Medicines were provided to the child and mothers in case of any identified illness apart from providing Vitamin/iron/folic acid/ calcium supplementation using funds from Mukhya Mantri Bal Sandarbh Yojna, Nutritional meal, ideally, 2 eggs, 2 glass of milk, peanut cake, banana, and hot cooked meal worth Rs 40/- is provided to both the mother and the child using funds from the concerned Jeevan Deep Samiti; Screening of SAM children from mid of Aug 2015, MUAC tape has been recommended for identification of SAM children. On average around 811 severe and moderately malnourished children are identified every week. Out of which, 400 children fall into the SAM category; NRC Referral-SAM children are referred to NRC units located at 3 places in Jashpur. They are transported using funds from Bal Sandarbh Yojana (DWCD). At NRC units, the child and mother are given about 15 days of intensive care until the child’s nutritional status reaches normal using NHRM funds; Monitoring was done by the monitoring team that comprises CMHO, DPO, OIC Health, BMOs, BPMs, BEEs, BAAs, CDPOs and DECDOs who cover all 43 centers every week were done.

Programme Outcomes

- Average 3165 and 3696 children per month in 2014-15 and 2015-16 were mobilized, 90% of these children belong to the severe or medium malnourished category. NRC bed occupancy rate has been increased from 56.67 in 2013, followed by 74.17% and 76.24% in 2014 and 2015 respectively. NRC recovery rate from 36.02% in 2013 was increased to 49.44% and 77.05 % in 2014 and 2015 respectively. The overall NRC maximum reach out to tribal population was an increase for both male (43.47%) and female (56.53%), and social categories i.e. SC (66.40%), SC (5.60%), OBC (27.20%), and General (1.07%).
Progress of Lav Kumar’s health @ NRC

Weight on Admission: 4.8 Kg.
Weight on Discharge: 5.55 kg.
Weight on Follow-up: 6.150 kg.

Progress of Lav Kumar’s health after 2 years
Problem Statement

Availability, accessibility, and quality of services provided through the public health system are key issues, especially in tribal areas. Community Action for Health enables the community representatives to interact, monitor, and provide feedback to service providers to improve the delivery of health services.

Programme Description

Programme Outcomes

The construction of the Sub centre building was complete through “Shramdaan”, later support came from the district authorities. Performance of the health services improved in Rajasthan, and maternal health services improved in Bihar (5 districts). Enhanced trust and improved interaction between provider and community- improvement in service delivery (ANC, PNC, Immunization), the responsiveness of provider
to community needs, Improved provider attitude and behavior. Community-based inputs in planning and action- Appropriate planning and utilization of untied funds at VHSC, PHC, and CHC; Active involvement of PRI members in planning and functioning of health facilities. Reduction in out-of-pocket expenditure.

Financial Implications

The MoHFW has approved plans for 18 states (State PIP, 2015-16) and the amount of rupees 24.69 Crores has been allocated.

Scalability

Technical support was provided by the Advisory Group on Community Action (AGCA) for scaling up community action. It includes Develop/adapt manual, tools, communication materials; Building the capacity of state nodal officers and implementation organizations; Facilitating state-level visioning and planning exercises, including the development of State PIPs; Regular mentoring and guidance to states on programme implementation; Undertake programme implementation reviews.

Activities at Community Level
Problem Statement

India has one of the highest maternal mortality rates in the world, and Assam leads the country with the highest maternal mortality ratio of 328 deaths per 100,000 live births (against India’s MMR of 178). The Infant Mortality Rate (IMR) is 54 which is far above the national IMR of 40. Based on national and international obligations, the central and State government have enacted policies and programs to curb maternal and infant mortalities rates, such as the National Health Mission (NHM). However, due to insufficient budget allocation, weak implementation of policies, and poor monitoring and oversight, none of these programs are successful. These human rights violations are particularly prevalent for women hailing from Adivasi communities who live and work in the tea gardens of Assam.

Programme Description

Document and map gaps in the delivery of maternal and infant health services. Build a platform for communities to report health rights violations. Raise awareness on the government schemes and how to avail of them. The 40 women volunteer in Balipura and Dhekiajuli block, Sonitpur District, Assam. Project volunteers attended a series of training sessions on issues of maternal and infant health and rights and entitlements under the NHM. Volunteers identify health rights violations occurring in their areas and report them by SMS using a list of codes. It covers more than 30 types of violations under NHM and the Plantation Labor Act. The Project team in Tezpur verifies the reports by phone calls. Verified information is uploaded and mapped on a website and publicly available. Cases reported are addressed at the local level through the filing of complaints or litigation and advocacy with local health authorities.

Programme Outcomes

Community members gained rights awareness and confidence and skills to address violations. More than 70 cases were collected, and a report was produced and submitted to district-level authorities. Establishment of periodic grievance redressal forums where women volunteers raise cases reported with block-level health authorities. Data used for filing complaints at the Block level led to improved access to maternal and infant health services. Data will also be used for litigation.

Reports were received about the lack of food rations in Anganwadi Centres in the Block from Oct 2014 to April 2015. Total 4 complaints were filed with local Anganwadi Centres to address the issue. In April 2015, 527 Anganwadi Centres in the Block received food grains and began providing rations to more than 27,000 beneficiaries (Women and Children).

Complaints filed on a range of health and nutrition issues arising in tea garden hospitals and local food distribution shops, resulted from Sapoie teas estate (1000 workers)- new ASHA appointed; Panbari tea estate (1517 workers)- new doctor appointed; Tinkhurria teas estate- APL cardholders (about 150) received food rations; Dhekiajuli CHC- Complaint was filed about undue payments asked for pregnancy registrations. Now pregnant women are not charged money anymore; Other 5 complaints are currently pending against CHC, PDS shops, and tea garden hospitals.
Problem Statement

Infant deaths in Attappady in 2013 -36 (30)out of 1016 deliveries. It was shocking to see in Kerala- a state with superb achievements in human development, people’s planning, governance, and female literacy, an alarming rate of malnutrition deaths of tribal infants/ Children in Attappady. The direct causes of infant deaths in Attappady were low birth weight/ extremely LBW, prematurity, Sepsis, Congenital Anomalies. Underlying causes were teen marriages, maternal under-nutrition, poor diet patterns among tribal, Pockets left out for service delivery, Poor interdepartmental Co-ordination, Poor health-seeking behavior, Poor monitoring of service delivery.

Programme Description

The initiative was launched in January 2014 for improving child survival and child nutrition. Knowing the nutritional status of every child on a real-time basis, using mobile telephony and GIS technology. Challenge was to expose malnutrition for focused curative and preventive care and Ensure services delivery to pregnant women and under-five children. After exposure to malnutrition, take appropriate measures. Ensuring early registration to all PW, ensure that designated services are provided in time to all. For those who are already in the critical stage of getting SOS from every sick child and other emergencies, Take appropriate action.
Programme Outcomes

Mobile notification on due services for ANMs. Dynamic locator for an action plan (D-LAP), ANC services in Mid-April to Dec 2014 was 136 and from Jan to mid-Sep 2015 it is 466. Number of child death decreased from 17 in Mid Apr to Dec 2014 to 17 in Jan to mid-Sep 2015. The number of Infant death reduced from 12 in Mid Apr to Dec 2014 to 8 in Jan to Mid-Sep 2015. The percentage of SAM children reduced from 4.74% in April 2014 to 1.2 % in July 2015. The percentage of SUW reduced from 14.57% in April 2014 to 9.23% in July 2015.

Scalability

It is made part of the existing system for service delivery reporting, monitoring at all levels. Based on the feedback from different stakeholders updating and customization are done regularly. Piloted in tribal areas in Wayanad, Government has decided to expand the program to the complete Wayanad district this year. Current and future schemes and programmes implemented through various agencies are linked with this system. Availing of govt Schemes by pregnant women can be ensured. NRC – C MAM programme linked to JATAK.
Problem statement
The motto is to reach and provide healthcare to unreached tribal population. The 50% of the PHCs provide comprehensive community health care. North-East have difficult reach population, without electricity, communication, education, interior, inaccessible areas, devoid of healthcare facilities provided by the government. Such areas, Karuna Trust build partnerships with the state government and build up public health system.

Program Description
Provides Comprehensive Primary health care including MCH, NHPs and other endemic diseases along with addressing other determinants of health, by understanding the traditional culture and empowering to manage themselves. A partnership formation (Public-Private partnership) with Central, state government, NGOs and Local self-government for the effective implementation of the services.

Program outcome- Sustainable development of tribal people through right based approaches to health, education, livelihood security and biodiversity conservation. KT manages the non-functioning/non-profiting PHCs and now they have become Community hubs through community participation process.

Changes brought by Karuna Trust in NE

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non/poor functional PFIC</td>
<td>Functional at 24x7 pattern &amp; bas per IPHS</td>
</tr>
<tr>
<td>Non functional SC</td>
<td>Functional</td>
</tr>
<tr>
<td>Inadequate drugs, equipment</td>
<td>Adequate, 120+ verities of essential drugs</td>
</tr>
<tr>
<td>No lab facility</td>
<td>All essential lab tests are done</td>
</tr>
<tr>
<td>No IPD, OPD almost nil</td>
<td>6-12 beds with diet facility, 2 MOs</td>
</tr>
<tr>
<td>Full immunization (0-1 yr) &lt;30%</td>
<td>No staff staying Staff stay in PHC/SC 24X7</td>
</tr>
<tr>
<td>ANC coverage (&lt;40%)</td>
<td>72% achievement, 90% coverage in 60% PHCs 91% coverage (2014-2015)</td>
</tr>
<tr>
<td>No institutional delivery at PI IC/SC</td>
<td>47% ID in PI IC, 35% in SCs</td>
</tr>
</tbody>
</table>

Financial implications
Allocation of budget through PIP from Central government.

Scalability
With the support of community, NGO, central and state governments, such models can be adopted anywhere implied. Adequate Staff including medical doctors, equipment, drugs and timely grants will fetch such success stories ahead.
Some Glimpses from Health Facilities
**Problem statement**

High maternal & infant Mortality in Tribal areas of Vadodara District was 452 per 1 lakh and 55 per 100 live births respectively. It is mainly due to the unavailability of quality maternal and child health services in the tribal areas.

**Program Description**

Under the Safe Motherhood and Child Survival project-PPP project, few interventions have been implemented as CEmONC. Such as capacity building of front-line health workers, web-enabled computerised management system, infrastructures etc. Reviews on key health indicators periodically, efficient partnership with GOG and concerned Local self-government were ensured to provide all components under the CEmONC. PPP envisaged wide scope of helpdesks at district hospitals, backward linkages of healthcare facilities through ASHA, free ambulance, waiting rooms, drop-back services (khilkilahat), Mamta Ghar-mother waiting home, Post-partum counselling and follow-up, ICTC, Kangaroo mother care, ARSH clinic. Also made possible in free of cost for poor communities, accessibility within 40 km radius for tribal poor, periodic health camps at community level. Nearly 9 lakh population belongs to 6 tribal blocks were been utilised these services.

**Program outcome**

MMR declined from 452 to 263 per 1 lakh population (41.8% reduction). The number of OPDs steeply increased from 3312 to 35602 during 2006 to 2015. Community became more aware about child health and the health utilisation increased from 8% to 30% by 2015. High risk deliveries have also been reduced from 40% to 28% due to effective antenatal services. Results showed an increase in institutional births showing increased accessibility for health care services and proper coverage in ANC IEC activities. Other major minor surgeries have been performed appropriately to increase the quality of life. A broad estimation of annual savings among those who sought services from the CEmONC were Rs. 27,810,620 per year.

**Financial implications**

From Central and State government

**Scalability**

CEmONC through PPP can achieve better health indicators to attain the SDG. The engagement in the model for nearly a decade has helped in setting systems and procedures that could be utilised for quick and assured results and hence it can be easily replicated in other tribal areas. The model also provides opportunity for shared resources and partnerships between government, corporate partners and engagement of Civil Society Organisation to achieve the goals of MDGs and SDGs.
### Facilities
- Gynec Care
- OT
- Counseling
- Pediatric Care
- Laboratory & Pharmacy
- Childhood Services

### Major and Minor Surgeries

<table>
<thead>
<tr>
<th>Type of Surgeries</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>2014-15</th>
<th>Total</th>
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<tbody>
<tr>
<td>VH</td>
<td>180</td>
<td>208</td>
<td>145</td>
<td>104</td>
<td>57</td>
<td>691</td>
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<tr>
<td>TL</td>
<td>11</td>
<td>53</td>
<td>118</td>
<td>161</td>
<td>107</td>
<td>450</td>
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<tr>
<td>DAE</td>
<td>45</td>
<td>73</td>
<td>33</td>
<td>37</td>
<td>25</td>
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<tr>
<td>MTP</td>
<td>7</td>
<td>22</td>
<td>44</td>
<td>39</td>
<td>112</td>
<td>260</td>
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<tr>
<td>TAH</td>
<td>50</td>
<td>14</td>
<td>8</td>
<td>10</td>
<td>6</td>
<td>88</td>
</tr>
<tr>
<td>Cervical Encircage</td>
<td>13</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td>24</td>
<td>54</td>
</tr>
<tr>
<td>D&amp;C</td>
<td>1</td>
<td>0</td>
<td>13</td>
<td>8</td>
<td>22</td>
<td>33</td>
</tr>
<tr>
<td>Cervical Tears, Sutured</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>8</td>
<td>22</td>
<td>34</td>
</tr>
<tr>
<td>Myomectomy</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>NDVH</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>10</td>
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<tr>
<td>Resuturing</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
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<tr>
<td>Other</td>
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<td>11</td>
<td>17</td>
<td>12</td>
<td>11</td>
<td>53</td>
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<td><strong>Total</strong></td>
<td>308</td>
<td>369</td>
<td>363</td>
<td>384</td>
<td>255</td>
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### Services

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<tr>
<th>Services</th>
<th>Amount Saved (Rs.)</th>
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<tr>
<td>2012-13</td>
<td>2013-14</td>
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<tr>
<td>1 OPDs</td>
<td>11,55,990</td>
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<tr>
<td>2 Delivery</td>
<td>2,372,0,000</td>
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<tr>
<td>3 Govt. Surgeries</td>
<td>311,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,79,86,990</td>
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Problem statement
High number of deaths of newborn babies within the first month of life occurs during pre-birth, delivery and post-birth stages, most of which are preventable deaths Pneumonia, Asphyxia/prolonged delivery.

Program Description
Project goal is to reduce neonatal and infant mortality on Seraikela block of Jharkhand by facilitating improved implementation of Home Based Newborn Care (HBNC) through the existing govt. health machinery at village level (Sahiyas) in a Public private Partnership mode and strengthen the public health system. The project area divided into zones and each field coordinator made responsible for the work under the area. Training of Sahiyas, ToT at SEARCH, Monitored handholding and supervision. Infrastructure and Health resources made available by SEARCH following the govt. guidelines. MIS by SEARCH to monitor and guide the coordinators daily, weekly, monthly, quarterly, annually.

Program outcome
Few sample case studies managed by the Sahiyas are noted such as Low Birth Weight and Hypothermis, Pneumonia, Sepsis, etc. Both Infant mortality rate and Nonatal Mortality rate has been reduced drastically by 46% and 39% respectively by the intervention from 2011 to 2014.

Financial implications
Planning of MANSI project in Jharkand via partnership of AIF (part funding, coordination, development sector expertise), TATA steel (ground knowledge of communities, local resources committee of workforce, project implementation), SEARCH (technical know-how consultancy), Government of Jharkhand (Administrative supports, permissions).

Scalability
The PPP has planned to envisage the programme or initiative to Odisha district inspite of many challenges like illiteracy, reduced man power, material etc.
### Project Implementation

**Training of frontline health workers - Sahiyas (part of Government health walker system at village level):**

- Adopted system of Training of Trainers at SEARCH
- Enable systemic capacity to furtherpass on training

- Closely monitored handholding and supervision

**Equipment, medicine and resource material:**

- As per SEARCH package following the government guidelines

**Management Information System:**

- Paper based tracking and management-following same as SEARCH

### Project Monitoring and Supervision

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Tool</th>
<th>Level</th>
<th>Type of Data</th>
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<tbody>
<tr>
<td>Checklist</td>
<td>Supervision format</td>
<td>MNHM, Zonal Confronters (ZCs)</td>
<td>Knowledge &amp; skills of Sahiyas Availability of resource material</td>
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<tr>
<td>Weekly</td>
<td>Community Meetings Review Meetings</td>
<td>MNHM, Zonal Confronters (ZCs) Field Coordinator (FG)</td>
<td>Knowledge and Attitude of community on MCH</td>
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<td>Supply status, high risk birth &amp; pregnant women</td>
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<tr>
<td>Monthly</td>
<td>Monthly Progress Repeet Case Studies</td>
<td>MNHM, ZCs, Field Coordination (FG)</td>
<td>Birth and Death details</td>
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<tr>
<td></td>
<td>Monthly Progress Repeet Case Studies</td>
<td></td>
<td>High Risk Cases Supply</td>
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<tr>
<td></td>
<td>Monthly Progress Repeet Case Studies</td>
<td></td>
<td>Status Major daily and weekly issues</td>
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<tr>
<td>Quarterly</td>
<td>Quarterly Progress Report</td>
<td>ME&amp;O Project Manager Senior Management</td>
<td>Birth and Death details</td>
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<tr>
<td>Annual</td>
<td>Annual Progress Report Vital Rate Survey</td>
<td>ME&amp;O Project Manager Senior Management</td>
<td>High Risk Cases Supply</td>
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<tr>
<td></td>
<td></td>
<td>Senior Management Partners (AIF, SEARCH, Govt. of Jharkhand)</td>
<td>Status Project Activities Major monthly Issues</td>
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<tr>
<td></td>
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<td></td>
<td>Analysis of vital rates</td>
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</table>
Use of Mobile phone Technology for Empowering ASHAs and PHC staff to improve MNCH Services in tribal areas of Gujarat: A joint initiative of SEWA Rural and Department of Health and Family Welfare
By Shrey Desai, SEWA Rural

Problem statement
Low coverage and quality of selected community based MNCH interventions to be delivered or facilitated by ASHAs and PHC staffs due to inadequate training/ poor skills of ASHAs, insufficient motivation, inadequate support, supervision, irregular payment of incentives.

Program Description
ImTeCHO is an initiative by SEWA Rural in partnership with Dept of Health, Govt. of Gujarat to improve coverage of proven MNCH interventions, improving performance of ASHAs and PHC staff, ensuring effective support, supervision and motivation. Its components include web interface at PHC level to provide timely and accurate information for better support to ASHA. Support given as morbidity detection and management, scheduling tasks, BCC through video clips, web-based incentives, supply management tools, assist them to manage sensitive cases, daily alerts, supervision, HR management, HMIS etc.

Program outcome
The make use of the initiative by ASHA were high and the task completion rate sustained as the login rate of ASHA. Medical officer utilised the portal effectively. Comparatively high number of Antenatal registration visits, IFA intake, delivery rates, Exclusive breast feeding, ASHAs visits to home for PNC, checking height and weight, any illness in the field data have registered in the portal.

Financial implications
Financial/HR support by State departments of health, GoG, LSG, Argusoft India Ltds, JAmsetji Tata Trust, Mumbai, ICMR Newdelhi, Mac Arthur Foundation

Scalability
Formal implementation research through Randomised Control Trial covering 22 PHCs in tribal area. Gradula expansion of this experiment of ImTeCHO to cover: Narmada and Bharuch districts, Future potential to upscale in other high priority blocks in Gujarat, support other NGOs interested in introducing mobile phone technology along with integrating other health programs.
Main Menu and Schedule Alerts for ASHA

Tasks at VHNSD

Inbuilt Videos for Awareness
Automatic Diagnosis, Risk Screening and Treatment Protocol

Supervision and Support made Easy and Effective at PHC Level
Problem statement
The Indian health care HR challenge is the unavailability of physicians for the needy people, Reduced accessibility 26% presence vs 70% requirement in rural India.

Program Description
Capacity building strategy using AYUSH physicians trained through Bridge Training Program, in the use of evidence-based protocols to deliver quality, primary healthcare to inaccessible populations. ICTPH AYUSH training strategy implemented for physicians in Sughavazhu network. Sughavazhu physician training program conducted for licensed Ayurveda, Siddha, homeopathy practitioners by MBBS physicians, M.Pharm graduates and nurse trainers. They had 2 months contact classes and practical training with module-wise written examinations and test. It focused on pharmacology, protocols, interventions, practical skill enhancement, technology, patient care.

Program outcome
ICTPH AYUSH training strategy implemented for physicians in Sughavazhu network for primary care delivery in rural Thanjavur, standardised treatment guidelines and workflows, HMIS, Chronic disease management. 34 AYUSH physicians trained in protocol driven primary care delivery: served 7 catchment areas, 70000 primary care patient visits, CHD screening for over 6000 adults, cervical cancer screening for over 2000 individuals, School health activities, community camps etc

Financial implications
By Sughavazhu Healthcare.

Scalability
IKP(Innovation,Knowledge,Progress)-BTP(Bridge Training Program) through Sughavazhu clinics for enhancing healthcare of the needy. Recommendation for curriculum development and validation.
ICTPH Primary Care Protocols

Developed in collaboration with Penn Nursing
- System based approach
- 81 protocols

Adapted to Indian context
- ICTPH Medical Advisory Board
- In-house MBBS physicians

Conditions include acute ailments, upper respiratory tract infections, gastro-intestinal conditions (diarrhea, acidity), urological conditions, chronic conditions

Evolution of the BTP

Clinical Care Protocols

SughaVazhvu Physician Training Program

Bridge Training Program

SughaVazhvu Rural Clinics
Problem Statement

Bilaspur district has a population of 26 lakhs out of which 12 lakhs belong to the tribal population. The region has poor access to healthcare facilities and many nurses, paramedics (Lab tech, OT tech, Pharmacists) and doctors are not willing to work in these areas. There is also an existing cultural and language barrier where tribal patients access healthcare.

Program Description

The goal of the program was to prepare a large cadre of tribal girls as ANM/GNM to serve in their own community and their hospitals.

JSS started a Nursing school in 2010 with support of the tribal welfare department of Govt of Chhattisgarh recognized by Indian Nursing Council, State Nursing Council, and the health department of Chhattisgarh. They were permitted to have 25 candidates each per year for the ANM and GNM courses. Selected candidates belonged to the families below poverty line and were either tribal or Dalit girls. The process started at village level by spreading information by visiting community, family and tribal girl’s hostels etc. Selection process took into account a) Merit of the candidate b) Social background c) Social sensitivity d) Awareness about problems with rural and tribal people. These trainees were exposed to all Tiers of the programme structure

Program Outcome

With financial aid they were able to build hostels for tribal girls. Training programme started in 2010 and so far, two batches of ANMs have graduated with 100% result and 90% students have been awarded distinctions. As interns these girls enhanced their skills in various specialities like emergency, new born care, obstetric and community health. Among these girls, 60% have been posted in Govt. sector in sub centre, PHC &CHC. 30% are working in voluntary sector and 10% in private sector.

Financial Implications

Admissions were made at zero cost to the students. As part of the grant from the TWD, they received funds for hostel construction to accommodate 150 students. A budget has also been drafted for training program.
Scalability

JSS was successful in training Mid-level workers (Senior health workers) from 10 organizations across the country working in community health for handling common emergencies. These health workers are trained to handle common emergencies in rural areas.

Local Tribes in the area
- Gond
- Baiga
- Birhor
- Uraon
- Kol

Trainees are exposed to all Tiers of our programme structure
Problem Statement
Scarcity of human resources in the districts of Bastar division and Surguja division as compared to Bilaspur and Raipur.
Bastar division: 90% specialist positions, 60% Medical officer and 66% staff nurse’s positions remain vacant in Bastar division
Surguja Division: 88% Specialists, 51% medical officers, 62% Staff Nurses remain vacant

Program Description
The goal of the program is a) to ensure availability of human health resources to improve healthcare services in tribal areas b) to overcome the issues of HR unavailability, decision was taken to adapt HR outsourcing through agencies c) to Hire service through HR agency, where employee remain employee of the agency but works in health facilities d) to Reduce liabilities, increase flexibility to re-deploy & ensure effective management e) to enable them to motivate to work in difficult areas by making the head-hunting process easy and simple.

Program Outcome
Through the out-sourcing model as on now 723 Staff nurses and 16 doctors have been deployed which improved human health resources availability that ultimately resulted in increased service delivery. This made head-hunting process easy and simple by the HR agencies to identify motivated personals from various part of country to work in the difficult areas.

Financial Implications
The financial burden is similar to the regular set up.
## Evidence of the Impact (SN Recruitment)

<table>
<thead>
<tr>
<th>Division</th>
<th>Districts</th>
<th>Sanctioned</th>
<th>In Position</th>
<th>Vacant (1/02/2015)</th>
<th>Engaged Through Out Sourcing</th>
<th>Vacant (31/08/2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surguja</td>
<td>Jashpur</td>
<td>173</td>
<td>65</td>
<td>108</td>
<td>95</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Surguja</td>
<td>151</td>
<td>91</td>
<td>60</td>
<td>58</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Koriya</td>
<td>118</td>
<td>54</td>
<td>64</td>
<td>58</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Balrampur</td>
<td>99</td>
<td>14</td>
<td>85</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Surajpur</td>
<td>113</td>
<td>34</td>
<td>79</td>
<td>66</td>
<td>13</td>
</tr>
<tr>
<td>Baste</td>
<td>Bijapur</td>
<td>73</td>
<td>22</td>
<td>35</td>
<td>51</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Narayanpur</td>
<td>57</td>
<td>22</td>
<td>35</td>
<td>35</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Jagdalpur</td>
<td>105</td>
<td>74</td>
<td>31</td>
<td>31</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Dantewada</td>
<td>78</td>
<td>24</td>
<td>54</td>
<td>54</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Kanler</td>
<td>147</td>
<td>45</td>
<td>02</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Sukma</td>
<td>60</td>
<td>111</td>
<td>42</td>
<td>42</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Kondagaon</td>
<td>106</td>
<td>40</td>
<td>6.5</td>
<td>66</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>1280</strong></td>
<td><strong>523</strong></td>
<td><strong>757</strong></td>
<td><strong>723</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>
Problem Statement
Lack of access, reliability and quality of ante-natal and post-natal services at the PHC with major indicators such as blood pressure, blood test (for sickle cell anaemia), weight and haemoglobin count not being regularly monitored. Widespread misconceptions linked to breast feeding and weaning food in the community as well as maternal deaths going under-reported has been a major issue which is a result of lack of awareness in the community. Another problem which is faced by the community is lack of technical knowledge and skills related to healthcare and nutrition support.

Program Description
The goal of the program is to improve maternal health and child survival in tribal areas b) to engage the community-especially women- in understanding, resolving, and monitoring specific health interventions to improve health outcomes and c) to empower the community to seek specific interventions from the ICDS and the Health Department towards maternal and child health and to increase accountability of these governmental institutions.

Program setting: women in their 8th month of pregnancy were included and same women 10 days after their delivery. There were two phases for assessing the reach of PNC and ANC and every 3 months, a compiled report card is put together from the findings collected and then shared with doctors at PHC, their staff and the community.

Program Outcomes
Outcomes between 2012 and 2015 respectively

<table>
<thead>
<tr>
<th>Impact on ANC Parameters</th>
<th>2012</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy Registration</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Weight of the mothers</td>
<td>2%</td>
<td>51%</td>
</tr>
<tr>
<td>Sickle cell anemia assessment</td>
<td>0%</td>
<td>50%</td>
</tr>
<tr>
<td>Abdominal test</td>
<td>4%</td>
<td>31%</td>
</tr>
<tr>
<td>Blood pressure monitored</td>
<td>4%</td>
<td>53%</td>
</tr>
<tr>
<td>Hemoglobin reported</td>
<td>4%</td>
<td>41%</td>
</tr>
<tr>
<td>Calcium supplement</td>
<td>3%</td>
<td>36%</td>
</tr>
<tr>
<td>Identified high risk mother</td>
<td>18%</td>
<td>76%</td>
</tr>
</tbody>
</table>
Scalability
The strategy relies on a model which does not need more medical doctors. Strong emphasis on education of the community and women about rational health practices and Integrating ideas into pre-existing systems to increase effectiveness.
Problem Statement
Primary healthcare for the tribals has availability, accessibility, affordability and quality concerns. Successful linkage of primary healthcare with secondary and tertiary healthcare for tribals and early intervention and rehabilitation is possible through outreach services.

Program Description
Goal of the program is a) to reach out to the unwell, underprivileged tribal people who are unable to reach even a nearby health center b) Provide at their doorsteps, easily accessible primary level medical care of highest possible quality c) to provide comprehensive primary healthcare (preventive, promotive, curative and rehabilitative) through outreach and linkage component for secondary and tertiary care.

Program Setting- Dharampur and Kaprada districts of Gujarat
Major tribes- Warli, Kunkna, Dhodiya Patels (99% of total population is tribal with 55% literates)

Features of the SRRHP MOBILE MEDICAL UNIT
- SRRHP vans operate as per a fixed route plan, on daily basis throughout the week from Monday to Saturday
- More than 65 outreach centers carefully selected where no health facilities are available are visited, once a week on a ‘Fixed-day-fixed-time’ basis
- Each doctor examines on an average 100-120 patients per day and provides them free of cost services including medicines, imparts health education messages and provides referrals to those in need
- Every patient is given follow up cards to ensure compliance
- Timings of outreach are 9 AM-4PM (suitable to the local tribals)

Program Outcomes
They have managed to treat a greater number of patients over the years, from treating 7816 patients in 2004-05 to 108351 patients in 2013-14. Through the outreach program no of patients treated increased from 44223 in 2009-10 to 81830 patients in 2014-15 with no of patients referred from Outreach to SRH that increased from 409 in 2004-06 to 5135 in 2014-15.

Government schemes implemented at SRH
- Bal Sakha Yojana
- Sarva shiksha Abhiyan
- ADIP (Assistance to disabled persons) Scheme
Financial Implications
Rising cost of running the program can be a constraint

Scalability
To ensure long term and sustained benefits on health of tribal community through promotive, preventive, curative and rehabilitative approach which can be easily replicated by any organization. An SOP has been laid down to facilitate this process with sustained and combined efforts that have brought about change in health indicators of the area.
Problem Statement

Disease specific in medically underserved population belonging to lower socio-economic class living in remote areas affects 14.8% population of Gujarat. No Cure of the disease is available and prevention is the only feasible solution which also includes improper treatment as a result of misdiagnosis of Iron-deficiency Anemia.

Program Description

Goal of the program is a) to screen entire tribal population by 2015 along with treatment and counseling to ensure prevention of deaths from Sickle Cell Crisis b) Reducing Burden of sickle cell disease and increasing productivity, longevity and quality of life c) to provide counseling for preventing transmission of disease to next generation.

Contents of Best Practice

**Early diagnosis through**
- Antenatal screening
- Adolescent screening
- Mass screening on mission mode
- New born screening
- Prenatal Diagnosis

**Prevention through**
- Marriage counseling
- Genetic counseling
- Building Community Awareness

**Reduction in crisis and in mortality through**
- Supportive treatment
- Regular follow up and counseling
- Lifesaving drug like Hydroxyurea
- Pneumococcal vaccination
- Advanced tertiary care centers

**Regular training and capacity building of**
- Healthcare providers and ASHA
- VHSNC (Gram Sanjeevani Samitis)
- Members and teachers
- Providing program manual
- 87% of tribal population (80.6 lacs) screened
- 16000 persons with SCD protected with pneumococcal vaccine
- Free blood transfusion to more than 1900 patients
- More than 3200 antenatal screening and 9000 newborn screening
- More than 145 Prenatal diagnosis, 5 MTP during the year
Program Outcomes

now about 87% of tribal population (80.6 lacs) have been screened with 16000 persons with SCD protected with pneumococcal vaccine. Free blood transfusion to more than 1900 patients have been provided and more than 3200 antenatal screening, 9000 newborn screening, more than 145 Prenatal diagnosis, 5 MTP during the year have been done so far.

Financial Implications

Resource intensive campaign
**Problem Statement**

Severe and growing chronic disease burden in India where Diabetes and hypertension are major public health challenges in India. India is on its way to becoming the diabetic capital of the world and had over 60 million diabetic population (2011 estimate). The other issue is the debilitating impact on patients’ conditions and exacerbation of the problem in rural areas due to lack of awareness and lack of care access.

**Programme Description**

Goal of the programme is

a) to enroll all residents of a community into the community level primary care clinic and conduct a rapid risk assessment (RRA) exercise.

b) Enroll all residents of a community into the community level primary care clinic
   - A health extension worker (HEW), visits all households in the community
   - Enrolls all residents through internet enabled mobile communications device and sync with HMIS
   - Enrollment data includes demographic data and family health history of all residents of the community

c) Enrollment of residents of a community into the community level primary care clinic
   - A health extension worker (HEW) geo tags the household in terms of latitude and longitude geo coordinates
   - With geo tag, the HMIS is able to plot the distribution of enrolled population and their vicinity to the healthcare centre
   - Geo coordinates can be used to color code various population, street wise and village wise

d) Enrollment of residents of a community visiting the centre
   - The household ID helps identify the individual at a household level and village level
   - Every visit is documented and can be viewed such as: visit details, diagnostic visit details and previous visit details

e) Rapid Risk Assessment
   The screening tool is based on the WHO steps guidelines and risk is calculated based on six non-invasive risk parameters
   - Body mass index
   - Waist hip ratio
   - Tobacco consumption
   - Personal history
   - Age
   - Blood Pressure
In Sugha Vazhvu context, the RRA has been administered in three different scenarios:

1. As part of population enrolment activity during initial clinic set up in one catchment
2. As an individual intervention to assess CVD risk in the area in another catchment
3. Across the network as part of offering chronic disease management services

Focus Area

Thanjavur, in and surrounding Orthanadu Block, Serving 7 catchments and a population of approximately 75000 individuals

Program Outcomes

The first two RRA exercises covered groups of more than 3000 individuals in both cases. The approximate percentage of "at risk for CVD" population was respectively 57% and 68% as determined by persons with two or more risk factors for CVD. A segment of these "at risk" individuals availed confirmatory diagnostic testing; over 50% of those were confirmed for diabetes, hypertension or hyperlipidemia, which are strong predictors for heart attacks and strokes.

Financial Implications

For a typical community of 600 households and 3000 population, a one time E&RRA exercise will cost approximately Rs 50,000

Scalability

E&RRA for a 3000 person/600 household community is approximately a 120 person-day activity. E&RRA is a fairly scalable activity at the level of community. It is also scalable at the catchment area of each clinic as long as primary care clinic model is scalable.
Problem Statement

High cases of mortalities b) Low rate of accessing maternal services c) Malnutrition d) Home deliveries e) Cultural inhibitions f) Economic reasons g) Poor service Delivery h) Terrain - Interior places

Program Description

The objectives of the program are a) tracking expectant mothers with EDD b) Reducing home deliveries to Zero in the tribal Mandals and c) Enhance Maternal Services to tribal population of Adilabad

Description:

- Tracking EDDs
- Collect data of expectant mothers for each mandal from PHC
- Calls to families before due date
- ANMs, AWWs at village level
Program Outcomes

They have been able to cover 13 Mandals, 20 PHCs with a total population of 4,97,650 and have been able to complete 3000 deliveries from Feb 2014- oct 2015. The IMR cases have come down to 20 cases since the beginning of the program and MMR has been recorded at 2 for every 1000 cases with on 86 c-sections per 1000 deliveries.

Financial Implications

Health Expenditure- 3.8% of GDP and Indirect economic benefits- organized families

Scalability

At village level and at Mandals the ANMs, ASHAs, medical officer and supervisors can track expectant mothers in the area. Integrating call centres to connect them with the Project officers, DMHO and ADMHO
Problem Statement

Due to sporadic and distant geographical areas of tribal inhabitation the pregnant mother finds it difficult to attend the medical facilities during labor and this leads to more home deliveries with a tribal population in 800 villages of 70 PHC catchment areas.

Rationale for selecting the Problem:
- Tamil Nadu has achieved >99% of Institutional delivery
- In tribal areas the home delivery is to the extent of 0.5%

In order to reduce it further, birth waiting rooms are established.

Programme Description

To promote institutional deliveries among the tribal population thereby ensuring safety for the mother and child.

National Health Mission-Tamil Nadu

NHM helped in providing funds for the establishment of Birth waiting rooms (BWR)

The Directorate of Public Health and preventive medicine is the implementing Department of this initiative.

Programme Outcomes

The pregnant women along with her attender is provided Rs 80/day each during the entire period of their stay in antenatal and postnatal period.

The community health nurse of that particular block is supervising the functioning of BWR and will be paid Rs 500/- as honorarium.

BWR have the facility for cooking food.

Provided with 3 supportive staff for round the clock care and services.

Pregnant women are brought well in time for their deliveries and monitored during the entire process of pre labor and labor and the home deliveries have been reduced between 2013 to 2016.
Financial Implications

**BWR COST**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost: Approx. Rs 15 lakhs per unit</td>
<td></td>
</tr>
<tr>
<td>Non-recurring cost per unit: Rs 12.5 lakhs unit</td>
<td></td>
</tr>
<tr>
<td>Civil works</td>
<td>Rs 10 lakhs</td>
</tr>
<tr>
<td>Furniture, utensils and electrical appliances</td>
<td>Rs 2.5 lakhs</td>
</tr>
<tr>
<td>Recurring cost: Rs 1.80 lakhs per annum</td>
<td></td>
</tr>
<tr>
<td>Contingency</td>
<td>Rs 30,000 per annum</td>
</tr>
<tr>
<td>Electricity Charges</td>
<td>Rs 30,000 Per annum</td>
</tr>
<tr>
<td>Honorarium to the CHN and sanitary worker</td>
<td>Rs 24,000 per annum</td>
</tr>
<tr>
<td>Transport/POL for transport of mothers</td>
<td>Rs 96,000 per annum</td>
</tr>
<tr>
<td>Diet Charges</td>
<td>Rs 80 per mother and Rs 80 for attender</td>
</tr>
</tbody>
</table>

---

**Tribal Population in the State**

- Tribal: 1.1% of the total population (Census 2011)
- About 8 lakhs tribal people are living in TN
- The top 14 districts with % of tribal population:
  1. Nilgiris (4.5%)
  2. Dharapuri (4.2%)
  3. T.V. Malai (3.7%)
  4. Salem (3.4%)
  5. Namakkal (3.3%)
  6. Villupuram (2.7%)
  7. Veilore (1.9%)
  8. Ariyalur (1.4%)
  9. Tiruvallur (1.3%)
  10. Krishnagiri (1.2%)
  11. Kancheepuram (1.03%)
  12. Erode (0.97%)
  13. Coimbatore (0.82%)
  14. Trichy (0.67%)