

MAHAN, Melghat

Report of MAHAN trust -1997 to March 2019

1. Background

MAHAN (Meditation, AIDS, Health, Addiction, Nutrition) is a non-government organization established in 1998 to improve health care in Melghat region. MAHAN was touched by Gandhian teaching that “youths should go to the villages to serve as real India is in villages”. Melghat is the hilly forest area in the beautiful Satpuda mountain ranges. Population is 300,000 & 75% of them are tribal. Korku is the major tribe of Melghat. Most of the tribal (>90 %) are farmers or labourers, living below poverty line (>75%) & very hard life in *kaccha* houses without electricity (>90%) & illiterate (>50%). Medical facilities are worst in Melghat as compared to rest of Maharashtra.

Due to lack of proper medical facilities & superstitions, tribal goes to traditional faith healers/quacks (pujari & bhumkas) for treatment of illness. Skin is burnt with red hot iron rod for reducing pain known as Damma. This lead to very high under 5 children mortality (>100 per 1000 live births) especially Malnutrition related deaths and very high mortality in age group (16-60 years) & maternal mortality. Moved by such things, we started the project in Melghat in November 1997.

Source of Inspiration:

Mahatma Gandhiji, Sant Vinoba Bhave, Swami Vivekanand, Vasantao Bombatkar, Dr. Abhay Bang, Dr. Prakash Amte

2. Service-based Interventions

SAMMAN: (Community Based Management for severely malnourished Children: SMC)

Project Aim: To reduce the prevalence and deaths due to severe malnutrition (Severe Acute Malnutrition: SAM, Severe Under Weight: SUW) in <5 children in tribal villages of Melghat.

Key activities: Treatment of 2002 SMC with MAHAN LTF (Locally prepared therapeutic food) and MAHAN VIT-MIN-MIX (minerals and vitamin supplement) in 32 tribal villages by trained village health workers (VHWs) for 90 to 180 days period. Behaviour change communication (BCC) was done for >10,517 (add 2018-19 report) children and parents (Nutrition demo, flip chart, nail cutting, community growth chart etc.).

Impact/Achievement:

1. At the end of the treatment, 77.7% children came out of severe acute malnutrition. **Achieved target of international sphere standards.**
2. SUW recovery rate was 47.09%. Better than any project in world.
3. Only 3 children (0.15%) died during treatment. (Very Satisfactory achievement). **(Achieved WHO target <4% deaths in SAM children on treatment).**
4. Reduction in prevalence of severe malnutrition in intervention area as compared baseline .

SUCCESS STORY

Laxmi Before

treatment



Laxmi After home based

Treatment



Laxmi, 23 months old female child was brought to our hospital by our field workers. The child was very critical & suffering from worst degree of severe malnutrition & severe pneumonia. Her weight was 5.300 kg (expected– 10 kg). We requested relatives to admit the child in the hospital for treatment. However, they refused flatly, saying “she was admitted in various Govt. Hospitals but she

could not improve & finally sent back home” & ‘Now it is God’s will’. Lakshmi went home to her remote village in Melghat. After 2 days when MAHAN team visited Lakshmi’s house, they found that Agarbattis (fragrant incense stick) were being burnt in the house and relatives prayed to God. After long persuasion they agreed to accept our treatment. Our village health worker Meerabi (7th std.) treated her at her home for severe malnutrition and pneumonia as per treatment guidelines developed by Dr. Dani, Mrs. Pendharkar and Dr. Satav. Lakshmi showed steep improvement. Her pneumonia was cured. Her weight increased from 5.3 kg to 7.8 kg in 70 days. She is now normal child.

Challenges in near-term:

1. How to sustain and scale up in all tribal areas of India?

MCPEPAG: (Mortality control program for economically productive age group)

Project Aim: To reduce death in the age group of 16-60 years from 32 tribal villages.

Key activities: Treatment of patients of Hypertension, diarrhoea, Malaria, Pneumonia by VHW in village itself and referral of TB, Coronary Artery Disease, & other diseases for confirmation & management. More than 62067 illness episodes of patients have been treated so far. Behaviour Change Communication of >28068 cases were done. Provided antenatal care to >3000 pregnant women.

Impact: Age specific mortality rate and prevalence of untreated HT has been reduced in intervention area.

Parameters	Intervention Area	Achievement
Age Specific Mortality Rates (16-60 yrs) /1 lakh population	276.63	Achieved target for this year
Prevalence of Uncontrolled Hypertension	5.12%	Achieved target for this year

Success Stories:-

- 1) It's a story of perseverance and self-realization both on the part of supervisor, village health worker and the patient

The patient Bajarangsing Pawar, 40 yrs male from Village Kot , had sustained high blood pressure BP and was being examined regularly for the same. The BP was 154/99 and he was tobacco addict.

Village health worker and supervisor did continued counselling for tobacco de-addiction & proper diet. Initially there was total reluctance for change. Despite of the inertness of the patient to change the habits there was a sustained effort by the village health worker & supervisor. The perseverance by the team ultimately made some impact and the ice started melting down. One of the major catalyst / success factors was the village health worker being from the same village community. Patient decided to give up tobacco for 1 week, and that was the turning point of his life. He found his BP coming to normal in the range of 111/81. And eventually he gave up tobacco completely.

Till the date whenever there is health assessment in the village, the patient use to come for BP assessment and is quite cautious about the same. He thanks the MAHAN team for showing him the correct path.

- 2) Savitri Ganpat Bethekar 45-year female from Village Dabiyakheda presented with complaints of watery loose motions 3-4 times a day, for 2-3 days. She had danger sings in the form of decreased urination and was lethargic. She was given ORS and Tab. Norflox for 3 days by VHW. Now the patient is normal.



Challenges in near-term: How to sustain and scale up in all tribal areas of India?.

HBCC (Home-Based Child-Care Program)

Project Aim: To reduce child deaths and malnutrition in <5 children from tribal villages of Melghat.

Key activities:

Treatment of childhood illnesses like neonatal sepsis, birth asphyxia, Diarrhea, Malaria, Pneumonia, Normal new-born care etc. by VHWs >76244 illness episodes have been treated so far. Behaviour change communication of 106064 person-episodes.

Impact: There is significant reduction in child deaths as compared to baseline.

Intervention Area	Rates
Under 5 Mortality Rate.	55.98
Perinatal Mortality Rate	28.84
Infant Mortality Rate.	47.07

SUCCESS STORY

- 1) Kokmar is one of the most remote village in dense forest of Melghat. Death is only solution for such critical children as the primary health care is 35 km away from the village with very bad road through dense forest. Divya Khanji Jamunakar, 2 year- 9 Months aged girl, from Kokmar village, had coughing, difficulty in breathing, wheeze and fever (101.3-degree F). Her respiration rate was 48/ min for 3 days (from 9/2/2019). So VHW of the village diagnosed her as case of pneumonia and gave her treatment in the form of Syrup Asthalin, syrup Paracetamol, and Cotrimoxazole. As there was no significant improvement, in 2 days VHW stopped Cotrimoxazole and started dispersible tablet Amoxycillin. After 7 days of treatment, she had no sign and symptoms of pneumonia. She was cured. Hence such treatment by VHW is an angel work in-accessible part of India.



Challenges in near-term: How to sustain and scale up in all tribal areas of India?

Blindness Control Program

Project Aim: To improve vision of poor tribal and prevent blindness.

Key activities:

1. Operated more than 1963 cases with Ophthalmic problems especially cataract (intraocular lens implantation-IOL phacoemulsification, Dacrocystitis, Pterygium, Sac), free of cost.
2. Door to door Eye check-up of more than 264953 people from > 450 tribal villages.
3. More than 56416 **students** of Melghat were examined and more than **1081** students and poor tribal were given spectacles free of cost.
4. People Covered Under Mass awareness programs: 6790
5. More than 1000 children were treated with Vitamin A.

Impact:

More than 23300 patients were given vision and their blindness was prevented.

Success story:-

- 1) During field visit, field supervisors of Mahan Trust found a patient Rannu Dimmar Nagle of Batlakala Village, Madhya Pradesh . She was blind due to bilateral mature cataract. She was not able to perform her daily activities. When our supervisors went, she was taking help of her granddaughter to perform her daily activity. We told her that you have to get operated for cataract. She told us that she doesn't have enough money to come to hospital for surgery. She also mentioned that her son and daughter-in-law were not supporting her for treatment. Our supervisors explained her that we are coming from MAHAN Trust, Utavali and we provide free treatment for poor and needy people. We told her that we will provide transport, food and medicines for your treatment. She was happy to listen that we will provide her treatment completely free. She told that she is ready for surgery. We brought her to our hospital and

after physician fitness check-up, she was operated for cataract surgery. After surgery we explained her all post-operative care. She was very happy that she was able to see the world and she thanked all team of MAHAN trust for their immense help. Our team was pleased to observe that she was able to see the world and perform her regular activities independently.



Dr.Kavita Satav operating cataract patient



Community level screening for eye disorders



Cataract operated patients

Challenges in near-term: How to convince tribal patients for cataract surgery ?

Story 2: Work is more important: **Eye team on wheel:** An eye camp was organised in our hospital. Dr. Kavita and her team of dedicated field workers went to Madhyapradesh for screening cataract patients. While they were crossing the river Tapi, their Jeep was trapped first in the mud in river & then on the slope of hill near the river bank. The river was broad and it was evening and rainy season. The scene was frightening as there was no village nearby. They could not move the vehicle. Then the team with the help of some travellers tried to put some hard material like stones, dried broken branches of trees below the tyre of jeep. After the struggle for one hour, they could remove the vehicle from the jeep. We realised how difficult life is for the poor tribal especially serious patients during such rainy season. More than 36 poor tribal patients were operated.



Team of MAHAN clearing the road, trying to push jammed jeep

MAHAN Mahatma Gandhi Tribal Hospital & Sant Vinoba Bhave Children Hospital, Jamanalal Bajaj surgical and eye hospital



Figure : Hut hospital in beginning



WAITING space for patients



New hospital

Project Aim:

To improve health status of poor tribal of Melghat by reducing deaths and malnutrition and by providing emergency medical care to serious patients, etc.

Key activities & Achievement:

Treatment of patients by expert physician, eye surgeon and paediatrician.

Patients treated in the Hospital >101843

- Patients admitted and treated in intensive care unit and ward >5782
- **Treated >2632 serious patients** like Heart attack, Brain Haemorrhage, Cerebral Malaria, Meningitis, Tetanus etc.

Impact:

- **Saved >2500 precious lives in our hospital.**

Success story:-

1) Ritik Gulab Dhimrekar, 3 months male child from village Chakarda, wt. 4.350 KG presented with complaints of loose motion, vomiting, difficulty in breathing and breast feeding. On observation, abdomen of the child was distended and the child was lethargic. He was treated by paediatrician as case of severe Pneumonia and? Sepsis with IV antibiotics and supportive treatment for 3 days. After 3 days, child started accepting breastfeed and distention of abdomen was also reduced. The child was discharged after 7 days in good condition. Treatment was free of cost.



2) Miracles of MAHAN Trust Melghat!

I have heard that life never gives you second change but sometimes it surprises you with 3 to 4 chances, which was proved by “Yohan Baba” ! Farm of Yohan Baba is situated along the river side, which come with an advantage as well as a disadvantage. During the rainy season the river water overflows into the field. Month before Baba was collecting wood for Kitchen purpose from the overflowing river, where suddenly he fainted due to heart attack. Soon the people took Baba to MAHAN Trust Tribal Hospital. At that time Baba was in Heart Failure, the heart rate was merely 35 per minute and the blood oxygen level was only 75 %. Baba wasn't responding when I asked him “Baba Kya ho raha hai ?” Not answering to this he kept his hand on his chest and was trying to say something. Baba had very less time. The Nurse immediately took him for ECG, one nurse recorded

BP and there were chances of heart attack in the ECG . Immediately Dr Satav sir started treating Baba with Streptokinase which is an expensive blood thinning lifesaving emergency drug which is not covered under Government supply. Immediately Baba was started on emergency atropine and adrenaline injections and was put on ventilator. We lost hope and thought that now Baba won't survive but Dr Satav acted as a commander of a regiment who controls his commandants at war time which gave confidence to his staff nurse as well as me. Under continuous monitoring of Dr. Satav Sir, Yohan Baba after 18 hours breathed himself and said that the pain was reduced. Heart rates have so far reached to 75 per minute. But due to the water in the lungs, Baba was suffering from aspiration pneumonia, hypoxia and difficulty in breathing. Baba was on ventilator for 4 consecutive days. On the morning of 5th day, Baba himself started breathing without ventilator. Now a days, people even in the city do not get ventilator facilities because of which they lose their lives whereas here in the middle of jungle because of donors (Bajaj Finance Limited and Caring Friends) we have two ventilators in our hospital which gives life support. My greatest wish for Dr Satav is that he may always achieve success with his faith and determination. Baba improved with his condition but sometimes suddenly his health used to get critical with issues like Low Blood Pressure, reduced oxygen in blood which made me feel that Baba again became critical and we might lose him. But as I stated Life gives many chances which for Baba came in the form of Dr Satav Sir, who saved his life every time. Baba recovered from his heart problem but there were some more secondary infection such as Sepsis (Infection) due to river water in his lungs. In a tribal region such cases are directly referred to metro cities for higher antibiotics, specialist care and ventilator. But here at MAHAN Trust we have both the higher antibiotics, ventilator and specialist care. For the tribal's of this region this hospital is a dream hospital where we have all emergency facilities available on time which saves the life of people during critical conditions. More and more people are accessing the available facilities as the awareness for healthcare is increasing among the Tribal People. It has also created a need of increasing the Infrastructure of ICU and other required equipment. While leaving from this hospital Yohan baba said "I was lucky enough to have your MAHAN Trust hospital otherwise I would have died in the jungle. I will create awareness about this hospital to such a level that none of our tribal brother will die without treatment "



Treatment of serious patient of heart attack

- 3) Poonam Nilesh Kasture , R/o Bibamal delivered in Govt. hospital Dharni on 28.5.2017 . Weight of baby was 2.100 kg. Baby was weak and not accepting breast milk actively. She was discharged on 4th day. The baby was brought to our hospital on 3-6-2017. His weight was 1.685 kg, 415 gms (20%) loss in 6 days, which was life threatening. The baby developed neonatal sepsis and was limp but eager for feeds. The baby was admitted and treated in our intensive care unit. After few days his weight increased and his health became normal.



BEFORE Treatment



AFTER Treatment

Specility Camps:

- >314 camps have been organised.
- More than =21515 patients have been treated.
- **Key activities & Achievement:**
- **1. Plastic Surgery Camps**
 - a) **1020 plastic surgeries** were performed for huge post-burn contractures, oral & breast cancers, cleft lips & palates, parotid tumour, etc. Under leadership of Dr. Gahankari and Dr. Nisal.
 - b) Plastic surgery screening camp: 1920 patients were benefitted.
 - c) Pathology camp :1900 patients were benefitted.



Dr. Gahukar pathology Screening camp. Dr. Gahankari Operating case of post burn contracture.

Success story :

1) Dedicated intelligent surgeons win the battle:

A small village of Melghat – Toranvadi is witness of a panic journey of an orphan child (no mother and father) Reshma (1.5 years). She lives with her grandma and merely expressed her pain by words. She only knew the single weapon of expression that was continuous crying! It was also more painful for her as she had inborn cleft lip with cleft palate. Due to this she hardly took her proper food. It made her severely malnourished (Grade IV, SAM). Her weight was only 5 Kg at the age of one and half years!

Before Surgery. (1.5 years, 5 kg)

After Plastic surgery & RUTF



The girl had been rescued by the counsellor during the free plastic surgery camp in Mahatma Gandhi Tribal Hospital organized MAHAN, Melghat. The poor kid had been operated by the expert plastic surgeon Dr. Dilip Gahankari, Australia, Dr. Shailesh Nisal and the team. It was one of the critical operations as the girl was severely malnourished & severely anaemic. Hospital and HBCC staff treated her successfully. After 15 days she recovered significantly and was discharged. After discharge she was successfully treated at home by MAHAN team. Now Reshma can say something with her pink lips & pleasant smile rather than crying as before.

- 2) **Empathy wins disability:** A 28 years young poor tribal man was not able to walk due post-burn contracture of both knees for one year. He was disabled/handicapped. Due to poverty, he could not be operated outside. He was also suffering from Hepatitis B and hence few hospitals refused his surgery. Our team of dedicated doctor under able leadership of Dr.

Gahankari operated him free of cost without any fear at risk of own lives. He is now able to walk normally and working for his family. I salute to the team for very difficult surgery.

- **2) General Surgery, Gynecology and Ortho Camp:** Surgeons from Rotary club Nagpur and rest of India operated 148 patients of cancer of uterus, goitre, hydrocele, hernia, etc.



Operated case of Goiter

- **3. Cardiology camp** -90 patients screened and needy were treated. 2D ECHO of 100 patients done free of cost. **Coronary Angiographies:** done for 24 patients in Wardha . Rheumatic valvular heart surgeries for >10 patients organised in Amravati.
- **4. Ear, Nose, Throat Camps:** >1000 Children were treated and 5 were operated .
- **5. USG -sonography camp.** > 400 pregnant women and other-patients benefitted.
- **6. Dental camp:** More than 515 patients treated in villages and surgeries were done for >55 cases.
- **7. Surgery screening camp:** >1200 patients screened.
- **8. Gynaecology & Obstetrics camp.** >500 mothers benefitted.
- **9. Paediatrics camp:** . >1000 children benefitted
- **10. Blood testing camp** for >2000 patients. (Pathology, Sickle cell & Anaemia detection camps)
- **11. HIV & AIDS detection camp.**
- **12. Life style modification camp.**
- **13. Tuberculosis detection camp**

UMANG

Project AIM: To improve nutrition and socio-economic status of Tribal and to reduce addiction.

A) Agriculture part: Project AIM: To improve nutrition and socio-economic status of Tribal on long term.

Impact of Kitchen garden, Nutrition farm & Organic (Swavlambi) farm in 16 villages

1. Developed > 6165 nutrition gardens >2875 nutrition farms.
2. >208417 kg of vegetables, cereals, pulses, oilseeds, etc. produced. Most of the produce was consumed by the family. It acts as good source of nutrition to children and has prevented malnutrition.
3. Tree plantation: >400 plants.
4. Farmers of Melghat always face the problem due to heavy rain in rainy season & scarcity of water in summer. To solve this problem, MAHAN Trust with the help of DILASA & Caring Friends developed “**Doh Model**”, an innovative model of water conservation in 4 places. It has improved agricultural production even during summer and reduced malnutrition.
5. **Water conservation activities** done on 47 Acres of land.



Doh Model

Success stories

- 1) Pyaribai Kadma Jambekar (45 years age) from Ghota village developed nutrition farm. In the summer also her family is getting fresh organic green vegetables (0.5kg to 1kg/ day). She did not purchase vegetables from market.



- 2) Rameshwar Tumla Jawarkar (40 years), poor tribal person from Borikheda has non irrigated land and was not getting any profit from farm. MAHAN TRUST trained him for Organic Farming (Nutrition Farm). He developed organic farm over 1904 Square feet Plot and produced ample farm produce. He not only produced nutritious vegetables for his family but also sold the vegetables in local market and got 800 to 1000 Rs. per week. He is very Happy because of Nutrition Project Work. He told that he will continue organic farming for long time.



Figure : Nutrition farm Berdaballa

B) YogSadhna and Deaddiction

Project AIM: Prevention and treatment of addiction and positive health development of tribal through yoga and meditation.

Key Activities:

We regularly arranged Yoga Classes in 15 villages & >9000 children and youths were benefitted.

We celebrate International Yoga Day, by performing Yoga Sana in villages on 21st June.

Yoga and deaddiction camp:

- De-addiction camp: The first effort in history of Melghat.
- More than 150 patients of tobacco and alcohol addiction were benefitted due to our meditation and yoga camp.
- Reduced tobacco chewing by pregnant ladies and reduced prevalence of Low Birth Weight babies.

- **“NashaMukta Tyohar Abhiyan” (Alcohol Free Festival Campaign)**

‘Holi’ is the most popular and the biggest festival of Tribal. On this occasion, tribal celebrate the festival for 5 days by drinking alcohol in large quantity. We are practicing the ‘alcohol free festival campaign’ since past 7-8 years in villages. Due to MAHAN efforts, women & village committee members and key persons of villages (Ghota, Kot, Chitri) could successfully reduce social drinking to a significant extent. In two villages, alcohol production was stopped. Three villages celebrated holi without social drinking.

- Succeeded in banning alcohol production in 2 villages.

Benefits of alcohol-free campaign:

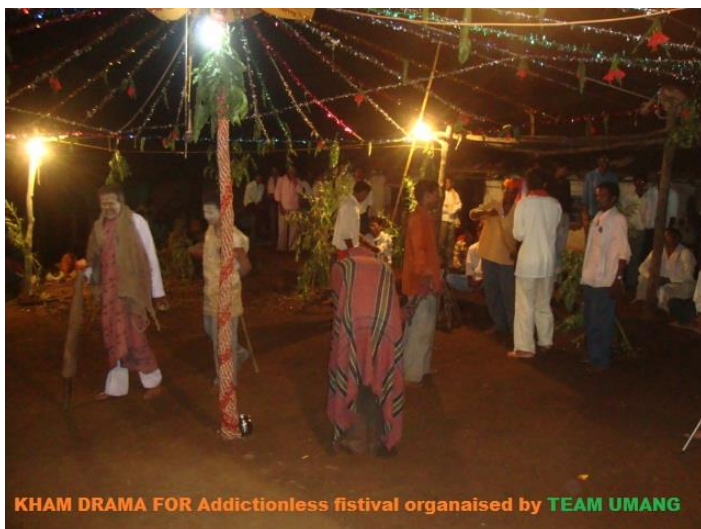
- People saved their money.
- No fights due to alcohol in households of those villages.
- No crime was reported in Police Station during this period.
- People participation increased.
- Improved socio economic status of peoples.



Yoga expert Manik taking Yoga classes in village



Figure 1 Celebration of International Yoga day



Success story: -

- 1) Melghat is known for addiction. Even 15% of female drink alcohol. Tobacco and Alcohol addiction of pregnant mother is one of the major causes of low birth weight babies and child deaths in Melghat and world and it was our dream to make Melghat female free from alcohol. One of the participants of our deaddiction camp was Jaso Kasdekar, wife of Subhedar, who first became de-addict in our camp. She was very much addicted to Alcohol. She was not ready to attend the camp also. But counselling done by Subhedar and our volunteers brought her to our deaddiction camp. In the beginning, she was restless. But After two days she was behaving normally and doing all processes seriously in the camp. She stayed in the camp up-to the last day and successfully became de-addict. She is the first woman participant from Melghat to attend de-addiction camp. Now she is happily living with her husband since one and half months in our campus without alcohol. Both are in phase of rehabilitation for which MAHAN trust is assisting by providing job. Both are very thankful to the Umang team of MAHAN trust and leading peaceful life.



De-addict couple celebrating new life

C) Community development and government scheme mobilisation:

- 1) Awareness is the key. Due to our continued efforts, the **government was mobilized to conduct mutation of land on scale** and many poor farmers became legal land owners.

2) Gramsabha (Community meetings)

We arranged gramsabha in our 100 villages for community participation. The various activities for mass health and nutrition awareness in 32 villages were village cleaning, tree plantation, personal hygiene, nutrition demonstration, health education for infectious diseases and proper nutrition, awareness rally, games for children, street play, village meeting, De-addiction and Malnutrition documentary.



Gramsabha- Village Gathering



Nail-cutting during Gramsabha

3) Benefitted >10100 people by mobilising various government schemes like MREGS, road, transport, water, electricity, public distribution system, Janani Suraksha Yojana, water supply, land issues, etc.

- 4) 4 villages have reserved 'Health Fund' for one year which could be utilized in case of emergencies for treatment of serious patients.
- 5) Tribal are solving village level problems on their own through community participation.
- 6) **Grain distribution:** 3435 kg of grain was distributed in 4 villages. More than 150 people participated in Shramdan for village development.
- 7) Distributed cloths to > 7000 poor tribal.
- 8) Conducted vaccination of cows, buffaloes, chicken, etc. Distributed chicken to tribal.

9) **Providing financial support to poor student for studies.**

10) 200 bicycles were distributed to the needy poor tribal people. It made them self-sustainable and got easy means of transport for education and earning.



Shramdan @ Berdaballa

Challenges:

1. Delay in distribution of MREGS payments at post office level and data entry of musters
2. Delay in data entry of new ration card holders

ARSH training program/ Camp

We arranged ARSH (Adolescent Reproductive sexual Health) training camps (>6) for adolescent children: >300 children, 14 VHWs and 32 tribal counsellors were benefitted.



Dr. Abhijit Bhardwaj & Dr. Devghare conducting ARSH training.



Dr. Khirwadkar madam conducting ARSH training

3. Research Interventions

A) Feasibility study: Tracking community mortality due to Respiratory Syncytial Virus (RSV).

(Collaborator: University of Colorado, Denver, USA (Financially supported by Bill and Melinda Gates foundation).

This project has been started from September 2016.

Project Aim:

To have accurate estimation of RSV related child deaths and pneumonia in the community and hospitals in U2C. So, it will affect global RSV vaccination policy.

Activities:

- 1) Nasal swab collection from the dead children and children suffering from Pneumonia or any seriously ill child in community or hospitals by village health workers and counselors from 95 villages and 18 hospitals.
- 2) Conducted international scientific advisory committee meeting



International conference conducted in MAHAN, delegates from 10 different countries attended the conference

Impact: Achieved the target of > 4000 nasal swab collection from Pneumonia and Dead children. System for community health have been developed in 95 villages.

Success story : of - supervisor

I have been working in the RSV project for a year now and have undergone various experiences, some good and some bad. I would like to write about one such incident in the village of Pankhalya.

On my first day in this village, while taking anthropometric measurements of 0-5 children, a group of boys started teasing me. Instead of being scared I confronted them head on and later complained to the Sarpanch. It was sad to know that instead of acting against the boys, the Sarpanch criticized my organization. He felt that I was only working for the benefit of the organization and did nothing valuable for the villagers. Thus, the matter halted and I continued working.

It has been nine months since this incident happened and now conditions have changed for better. The same Sarpanch now takes care of all our needs in the village. The village health worker in Pankhalya has developed good relationship with the mothers and helps them bring their sick children to MAHAN hospital. Due to our treatment the children became healthy and the entire village is aware

of it. I visited a lot of satisfied mothers who think that treatment at MAHAN hospital is better than PHCs and private hospitals.

Now, about 75% of the population in this village treats me with respect and talks positive about MAHAN. I feel happy about the work I do and am positive about the impact my work has.

B) Stool research for infections project:

(Collaborator: CIIMS, Nagpur)

Project Aim: To know prevalence of Clostridium Difficile, CD and other bacteria in stool samples of tribal of Melghat.

Activities and Impact : More than 400 stool samples have been analysed by DNA isolation and main causes of pathogens identified by Polymerase Chain Reaction(PCR).

Impact:

- 1) Achieved the target of 400 cases. It revealed that the clostridium Difficile is significantly less in Melghat tribes as compared to cities indicating less exposure to antibiotics.
- 2) Bacteria are major causes of Diarrhoea. It will have impact on government policies for diarrhoea management.

4. Policy Changes

Research, Analysis, Advocacy& writ petition in Honourable High Court of Maharashtra over the period, resulted into state govt. framing new policies, improving existing policies & implementing the models developed by MAHAN at other places as follows.

1. Counsellor Program

Project Aim: To strengthen the government health system and mobilize the patients for hospital care.

This is the best example of leveraging of government welfare scheme through counselling of tribal for hospitalisation of severely malnourished children and hospital deliveries along with monitoring & improving services of 17 government hospitals in Melghat.

Impact/Achievement:

- Benefitted >4,79,000 poor tribal patients. Increased **hospitalisation of severely malnourished children (12 times) and hospital deliveries(twice). Statistically significant Improvement in Hospitalized severely malnourished babies. $P < 0.0001$.**
- Thousands of lives (children, pregnant mothers, **severe malnourished babies**) have been **saved**.
- **It has** improved quality of hospital care, esp. treatment, **quality of food served to severely malnourished babies** in hospitals, referral services (ambulance) and increased number of serious patients attending higher referral hospitals. It cost <5% of total hospital expenses with very high leverage potential.
- It has been replicated in Rajasthan
- **On the verge of replication** in all tribal hospitals of Maharashtra.

Challenges:

1. No increments in payments of the counsellors.
2. Scarcity of funds for coordinators.

Success story:

- 1) One teenage unmarried pregnant girl was reluctant for hospital delivery who needed expert obstetric care. Our counsellor, Dinesh motivated her by repeated counselling and motivation. She was brought to our hospital by counsellor and caesarean delivery was conducted. Both mother and baby were saved.
- 2) Manisha Rathilal Bethekar is a pregnant lady from Gobarkahu. She was severely anemic and in need of urgent blood transfusion. But she and her family members were reluctant for hospitalization. Due to continuous intensive counselling by Lata Kasdekar (Counsellor), she was hospitalized and received blood transfusion. Thus, her life was saved.



Photo : Counsellor counselling the patient

- 2) **Proper surveillance**: 'Rajmata Jijau Mother and Child Health & Nutrition Mission' of Maharashtra Govt., accepted the MAHAN's finding about real status of severe malnutrition (>9%) & child deaths (IMR> 60 per 1000 live births) in Melghat (September 2005) & after our recommendations , later on observed similar findings in all tribal blocks of Maharashtra. This has impact on state level policies for malnutrition management. Initially government plans were for management of 1.2% of severe malnutrition and remaining 8% of severely malnourished children were not given special treatment. Now after our intervention those ~1 lakh child was given special attention and care. It has benefitted 1 lakh severely underweight and malnourished children.
- 3) **'Village Child Developmental Centers' (VCDC)**, a modified version of 'Home Based Feeding' concept, devised by MAHAN, is accepted by Rajmata Jijau Mission of Govt. of Maharashtra as state wide policy. MAHAN is part of planning policy committee for the VCDC for the entire state of Maharashtra. It has been implemented throughout Maharashtra since 2008-2009 benefitting >100000 severely and >200000 moderately malnourished children.
- 4) **Hot cook food**: Instead of Take Home Ration (prepared by industries), fresh hot cooked food (prepared by self-help group of tribal/ ICDS workers) is being given to children below the age of 3 years (> 30000) to prevent malnutrition in whole Melghat. By this change, lives of thousands of malnourished children are saved & crores of government money has been utilised properly. Many tribal females will get employment and will be empowered.
- 5) **Compulsory rural/tribal practice** for 1 year for MBBS doctors, failing which they will not be given admission for post-graduation in government medical college. Due to this policy change there were enough doctors in primary health centers of Maharashtra.
- 6) **Reclassification of severe malnutrition**:
WHO and UNICEF reclassified malnutrition in 2005-06 and advised government of India to give special treatment to only severely acute malnourished (SAM) children. Due to this lakh of children who were severely underweight (SUW) but not SAM, were denied special care and many of them died. MAHAN after scientific study in Melghat could convince honorable high court of Maharashtra to give order to Government of Maharashtra to use 'SAM' as well as 'SUW' criteria for classification and management of severe malnutrition. This has benefited lakhs of children of Maharashtra.

- 7) **Rajmata Jijau Mother and Child Health and Nutrition Mission have been restarted** by government and UNICEF from 2011-12. This has saved lakhs of children and pregnant mothers of Maharashtra from malnutrition and deaths. There was increment in the funds, number as well as rejuvenation of Village Child Developmental Centers & Child development centers in Maharashtra. It has benefitted >300000 severely malnourished children.
- 8) **The public distribution system (PDS):** New ration shops will be handed over to the self-help groups of tribal females instead of commercial private people. It will empower hundreds of tribal females.
- 9) **IAS/ IFS officer as Integrated Tribal Development Project Officer (PO):** Government has appointed IAS/ IFS officers as PO for eight tribal blocks, who are overall in charge (Additional Collector) of tribal areas & special nodal officer for coordination of all government schemes of tribal areas. It is in practice for 4 years and improved government working system.
- 10) **AIDS detection center** has been started in Melghat due to our recommendations.
- 11) **Maternal and child hospital:** Due to my recommendations, Kasturba Health Society and Mahatma Gandhi Institute of Medical Sciences Sevagram has started maternal and child hospital in Melghat saving many children and pregnant mother. MAHAN has provided basic infrastructure for hospital and residence of doctors for 4 years.
- 12) **Ashram school student deaths :** Dr. Ashish Satav is part of technical committee for reducing deaths in Ashram Schools of Maharashtra. Due to our recommendations, more than 5 state level policies for reducing deaths of ashram school student

As a result of above thousands of lives have been saved.

Policy changes in pipe line –will be implemented in near future:

- Home Based Child Care' program & Community based management of severe malnutrition will be replicated in all tribal blocks of Maharashtra. It will reduce child deaths and malnutrition by 50% thus saving >5000 children per year.
- After recommendation by Dr. Satav , High level equal development committee of government of Maharashtra -Kelkar committee and honorable governor of Maharashtra asked government to think of attaching medical colleges to tribal hospitals. In near future specialist doctors will be regularly available in the tribal areas. It will benefit more than 8 million tribal people.

- MAHAN developed innovative 'Counsellor' program for strengthening systems at govt. hospitals in Melghat. Government is thinking to extend this program in all tribal blocks of Maharashtra. It will benefit more than 5 lakh people of tribal Maharashtra.
- Every year >10000 children are dying due to infectious diseases in tribal area of Maharashtra due to lack of antibiotic treatment in villages. After our recommendations, government grass root ASHA workers or Anganwadi worker' have been empowered to treat infectious diseases with the help of antibiotic. It will prevent 10000 child deaths every year in tribal area.
- Dr. Satav prepared policy draft for reducing deaths of ashram school students from tribal area of Maharashtra as a member of Maharashtra Government Technical committee for prevention of deaths of Tribal Ashram school students. It will prevent many deaths of tribal students from Ashram schools.
- Dr. Satav participated in advocacy meeting with Honorable Governor of Maharashtra regarding starting hot cooked fresh food for under 3 children in all tribal blocks of Maharashtra. Hot cooked food will be served to under 3 children in all tribal blocks of Maharashtra

Participation in Policy level activities:

- Member of technical working group of International Minimal Tissue Sampling alliance.
- Ex Member of European Society of Paediatric research.
- Regional representative of advisor to commissioner of honorable supreme court for food security bill.
- Member of high-level Joint Review Monitoring Committee of Govt. of India for mid-day meal.
- Member of state level Village Child Development Committee of Rajmata Jijau Mission of Govt. of Maharashtra.
- Member of Special study group for Tribal health improvement of Vidarbha 'Statutory Development Board', appointed by Governor of Maharashtra.
- Member of Maharashtra Equal Development Kelkar Committee-tribal subcommittee.
- Member of 'Bhavishya Alliance', an international tri-sectorial alliance working for reducing malnutrition in Maharashtra.
- Member of Govt. state level policy making committee for 'Antibiotic use by ASHA or Anganwadi worker'

- Member of tribal Mission of government of Maharashtra.
- Member of consultation committee for developing programs for Rajmata Jijau Mother and Child, Health and Nutrition mission of Government of Maharashtra-III phase.
- Participation in national consultation process for 12th plan of India.
- Part of Maharashtra Government Technical committee for prevention of deaths of Tribal Ashram school students.
- Member of national child health policy committee by Lifebuoy company.
- Member of district Navsanjeevan committee for monitoring child health and nutrition activities.
- Member of special task force of Govt. for reducing malnutrition and child death in Melghat.
- Member of mentoring committee of district National Rural Health Mission.
- Secretary of Coordination committee of counselor program for govt. hospitals in Melghat.

Advocacy: Meetings:

Meeting with planning commission of India, Hon. Governor of Maharashtra, Honorable Chief minister of Maharashtra, Hon. Chief Justice of Mumbai High court, Hon. Chief Secretary of Maharashtra, Additional chief Secretary of Maharashtra, Director, Health services, Director General RJMCHN Mission, divisional commissioner, Mr. Pardeshi sir, IAS, civil surgeons, district health officers & other officers for reducing child deaths and malnutrition in Melghat and Maharashtra.

Presentations in Conferences/ Workshops, Journals, etc.

5. Paper Presentation in International Journal

1. Counsellor Program for Saving Severely Malnourished Children by Improvement of Government Hospitals of Melghat : Result of a Field Trial
A Satav¹, B L Sane², P Bhapkar³, M Shankarnarayan⁴, R Parhi⁵, K Bobde⁶ and P Upadhyaya⁷, www.nature.com/pr/journal/v70/n5s/full/pr20111053a.html 1/2 Pediatric Research (2 01 1) 7 0, 82 8–82 8; doi:1 0.1 03 8/pr.2 01 1 .1 053
2. “Home Based Child Care for Reducing Child Malnutrition in Melghat”
Paediatric Research (2 01 0) 68, 2 00–2 00; doi:1 0.1 2 03 /00006450-2 01 01 1 001 -003 89)K.A. Satav¹, A. Satav^{1,2}
3. Laboratory Investigations on the Diagnosis of Tuberculosis in the Malnourished Tribal Population of Melghat, India

- 4.** “Effect of Home Based Child Care and Nutrition Improvement on child mortality in a tribal population: Results of field trial”. A. Satav. *Acta Paediatrica* pg.51, volume 98, October 2009, Supplement 40.
- 5.** “Effect of Home Based Child Care (HBCC) on child mortality in a tribal population: Results of field trial”. A. R. Satav. *From Research to Improved Practice & Policy in International Health –abstract book*. 2009. Page 26.
- 6.** “Home based child care for prevention and management of severe malnutrition” Dr. Ashish Satav et. al, *South Asia Conference on Policies and Practices to Improve Nutrition Security – 2014*, abstract book.
- 7.** Prevalence of under nutrition in under-five tribal children of Melghat: A community based cross sectional study in Central India Vibhawari Dani, AshishSatav*, JayashreePendharkar, et. all, Reference: CEGH74 Journal title: *Clinical Epidemiology and Global Health*, Online publication complete: 10-SEP-2014, DOI information: 10.1016/j.cegh.2014.08.001.
- 8.** The assessment of cytokines in Quantiferon supernatants for the diagnosis of latent TB infection in a tribal population of Melghat, India Prachi R. Bapat, Ashish R. Satav, Rajpal S. Kashyap, *Journal of Infection and Public Health*. 2015(412)
- 9.** Community Based Management of Severe Malnutrition- SAM and SUW in U5 Children of Tribal Area, Melghat, Central India. Vibhawari Dani, Ashish Satav. *Indian Journal of Applied Research*, Volume : 5 | Issue : 4 | April 2015 | ISSN - 2249-555X. Page:497-501
- 10.** Differential Levels of Alpha-2-Macroglobulin, Haptoglobin and Sero-Transferrin as Adjunct Markers for TB Diagnosis and Disease Progression in the Malnourished Tribal Population of Melghat, India.
Prachi R. Bapat, ¹ Ashish R. Satav, ² et. all. *PLoS One*. Published online 2015 Aug 4;10(8):e0133928. doi: 10.1371/journal.pone.0133928. eCollection 2015.
- 11.** Community Based Management of Severe Malnutrition- SAM and SUW in U5 Children of Tribal Area, Melghat, Central India. Vibhawari Dani, Ashish Satav *Emergency Nutrition Network* .
- 12.** Task Shifting in Health Care-AYUSH Debate – Dr. Satchit Balsari, Mrudula Fadake, etc.
Harvard -SAI, UNICEF 2017

6. Presentation and acceptance of the Home Based Child Care Program in many international symposia

Our research papers have been accepted in more than 16 international medical conferences, workshops, and seminars.

1. Dr. Satav presented research paper of reducing child deaths and malnutrition in London HBGDKi-conference organised by Gates foundation, welcome trust, USAID, Govt. Of Canada and UK, etc. as key note speaker. It was applauded .
2. "EFFECT OF HOME BASED CHILD CARE & NUTRITION IMPROVEMENT PROGRAM ON CHILD MORTALITY AND MALNUTRITION IN A TRIBAL BELT: RESULT OF FIELD Randomized Control TRIAL." Dr. Ashish Satav, et.al. Nutrition-2015, 4th International Conference and Exhibition on Nutrition. Chicago, USA, October 26-28, 2015.
3. "Community based management of severe malnutrition (SM) (wasting, under-weight) in U5 children of tribal area, Melghat, Central India" Dani Vibhawari, Ashish Satav, et. all. Nutrition-2015, 4th International Conference and Exhibition on Nutrition. Chicago, USA, October 26-28, 2015
4. Child health -at Hamburg Germany organized by European Society of Pediatric Research.
5. "From Research to Improved Practice & Policy in International Health" by NVTG and Uniting Streams, Utrecht, Netherland, The Netherlands.
6. HBCC research paper in Tribal health symposium by Indian Counsel of Medical Research.
7. Home based child care for reducing child malnutrition in Melghat- 3rd Congress of the European Academy of Paediatric Societies, EAPS 2010, Denmark.
8. Effect of Home based child care on child mortality in tribal population: Result of field trial - 3rd Congress of the European Academy of Paediatric Societies, EAPS 2010, Denmark.
9. "EFFECT OF HOME BASED CHILD CARE ON DIARRHEAL DEATHS IN A TRIBAL POPULATION: RESULT OF A FIELD TRIAL." "Infectious diseases of children at Hague, The Netherland organized by European Society of Paediatric Infectious Diseases-2011.
10. "European Society of Paediatric Research (ESPR) 2011: 52nd Annual Meeting", in Newcastle, UK -2011.
11. Effect of Home Based Child Care on child mortality & malnutrition in a tribal population : result of a field trial;" , Health and Wellbeing-the 21st Century Agenda: Royal Society of Paediatric Health , London, UK-2011.
12. Dr. Satav delivered MAHAN research of RSV pneumonia in International conference in Malaga Spain.
13. Dr. Satav delivered a talk about MAHAN research of reducing deaths and malnutrition in Melghat in international meeting, in medical college and university of Nottingham, UK.
14. Dr. Ashish Satav was invited to RSV conference for paper presentation in Asheville, USA
15. Tribal health by medical school of UK.

16. Counsellor Program For Saving Severely Malnourished Children By Improvement Of Government Hospitals Of Melghat: Result Of A Field Trial.
“ESPR 2011 52nd Annual Meeting”, in Newcastle, UK.
17. Counsellor program for saving severely malnourished children by improvement of government hospitals of Melghat: Result of a field trial. Connecting NGOs and Academia in Research for Global Health, Amsterdam, the Netherlands.
18. Home Based Child Care Program: Research paper presentation in International medical conference : Indo-Global Summit & Expo on Healthcare.
19. Community Based Management of Severe Malnutrition : Research paper presentation in International medical conference : Indo-Global Summit & Expo on Healthcare.

7. Presentation of work in many national symposia/conferences/workshop/ journals:

1. Oral presentation in International Medical Conference: Indo-Global Summit & Expo on Health care.
2. Conducted workshop for reducing child deaths and malnutrition for 23 voluntary organizations from Maharashtra with the help of UNICEF.
3. **Dr. Ashish Satav delivered oration in Maharashtra Association of Physicians state level Conference.**
4. Presentation in IIM, Indore.
5. National symposium on tribal health by Indian Counsel of Medical Research, Jabalpur.
6. National symposium on Infectious diseases by All India Institute of Medical Sciences, Delhi and Infectious diseases society of India.
7. Delivered presentation in Indian Institute of Management , INDORE .
8. Dr. Shinde presented our research in national tribal conclave in Jamshetpur.
9. National seminar on role of Ayurveda in management of malnutrition in mother and child of tribal area in GraminAyurvedmahavidyalayaPatur, Dist. Akola, Maharashtra.
10. National conference of infectious diseases organized by AIIMS in association with Infectious Diseases Society of India.
11. Dr. Shinde presented MAHAN research of reducing child deaths and severe malnutrition in national tribal conclave in Jamshetpur.
12. Community Ophthalmology Conference Eye India 04 organized by PBMA's H. V. Desai Eye Hospital, Pune.

- 13.** National workshop on MALNUTRITION by Narotam Sekhsaria Foundation. We presented paper on home based child care and counselor program.
- 14.** "Home based child care" State level workshop on women and child health in Melghat- at Amaravati.
- 15.** Presentation of MAHAN work in IIT, Mumbai.
- 16.** Presentation of MAHAN work in FICCI, etc.
- 17.** INDIAN JOURNAL OF APPLIED RESEARCH for 1st April, 2015 issue .Balu Mote, Ashish Satav
- 18.** Dr. Ashish Satav presented Melghat tribal health research in New Delhi as expert for Health System Transformation platform by Tata trust and government.
- 19.** Dr. Ashish Satav presented community tribal health research in Bhubaneswar, Odisha as expert for Tribal Health in Odisha Conclave for formulating policies for Odisha state.
- 20.** Dr. Ashish Satav was presented paper as guest speaker for national conference on One Health in Muthva Center.
- 21.**
- 22.**

Other Important work:

- 1. Dr. Ashish Satav was invited by Bill and Melinda Gates Foundation to USA for sharing our research in international workshop over Healthy birth growth development knowledge integration.**
- 2. Visit of Dr. Ashish Satav to Barcelona Spain to attend international meeting on Minimal Invasive Autopsy (MITS), to know the causes of deaths and decide global health policies. Dr. Satav is member of International Technical Working Group (TWG) for MITS.**
3. Dr. Satav was invited as expert for reducing child deaths and malnutrition in tribal area of Maharashtra (PPT of MAHAN research) in Gabha(Core) committee meeting (constituted as per order of Hon. High court of Mumbai) with Chief secretary of Maharashtra, Secretary-Tribal Development Department, Secretary Health department, Secretary Finance department of government of Maharashtra.
4. Harvard university USA and UNICEF has published success stories of MAHAN research in their joint publication.
5. Dr. Satav was invited as expert by UNICEF -Harvard university, USA and Govt. of Maharashtra for deciding state level policies for task shifting in rural and tribal health care delivery system.
6. Dr. Satav was invited to deliver research of reducing deaths and malnutrition in national workshop organized by Indian Counsel of Medical Research as expert.
7. Dr. Satav was invited as expert in Child death control committee meeting for deciding policies for treatment of childhood infections in tribal area of Maharashtra.
8. Presented our studies for reducing child deaths and malnutrition in meeting with honorable justice of Maharashtra in Mumbai high court in presence of 4 IAS officers, secretaries of government of Maharashtra, etc.

- 9. Visit of 18 international scientists to MAHAN center and Kokmar village. (including WHO consultant, consultant of Gates foundation, C.D.C and Professor of Pediatrics, from USA, Ex Director General of Health Services).**
- 10. Meeting with UNICEF regarding replication of MAHAN research in 100 tribal villages of Maharashtra.**
11. Dr. Ashish Satav presented MAHAN projects in 4 programs in USA organised by Arpan foundation, Maharashtra Foundation, ASHA Coordinators and Belwadi couple.
12. Meeting with international researchers in Nottingham, UK.
13. Visit of Doctors from Harvard university, USA to MAHAN trust for discussion on scale up of MAHAN project in Rural India.
14. Meeting with honourable chief minister of Maharashtra regarding Policies for Ashram school children deaths in Maharashtra in presence of his principal secretary and principal secretary of tribal development department.
15. Dr. Ashish Satav was invited to New Delhi as expert for Health System Transformation platform by Tata trust.
16. Visit of international researcher Dr. ERIC (Professor, University of Colorado, USA, Consultant WHO, Gates foundation and C.D.C) and DANIEL, USA..
17. Visit of Dr. Tanya (Gastroenterologist) , Dr. James, (Radiologist) and Dr. Shrikant (Infectious disease expert) from UK.
- 18. Conducted workshop for reducing child deaths and malnutrition for 23 voluntary organisations from Maharashtra with the help of UNICEF.**
19. Dr. Ashish Satav was invited as chief guest for Indian Medical Association, Nashik installation program.
20. Dr. Ashish Satav was invited as guest of honour for academy of Paediatrics, Nagpur- installation program.
21. Dr. Ashish Satav was invited as guest speaker for national conference on motivation for medical students in Tirupati.



Photo: Demonstration of Ready-to-use-therapeutic food to the participants in training.

22. Visit of Jagdale IAS , Managing Director , Maharashtra State Co-op. Tribal Dev. Corporation, Ltd. Visit to MAHAN centre.
23. Visit of Dr. Archana Patil, additional director health services, Maharashtra Govt. with team for understanding MAHAN research and its future replication in whole Melghat.
24. Meeting with SDTT team for helping Tata Trust to design program for analysis of impact of Nutrition farm of Pata model on child malnutrition.
25. Meeting with GazalaPaul, Paul Hamlyn Foundation, UK.
26. Visit of Global giving team member.
27. Invited as expert of Malnutrition by People Concern Governance Trust -Mr. Ribero, IPS, retired Director General of Police of state government, Dr. Magotra-Cardiothoracic surgeon in presence of Commissioner, Vigilance department of govt. of Maharashtra.
28. Visit of Dr. Pankaj Harkut, Cardiologist, Dr. Tayade Cancer surgeon, Dr. Anil Patel ENT surgeon, Dr. Gadekar Dentist, Dr. Hazra Surgeon, Dr. Raju Wilkinson Surgeon and others.
29. Construction of DR. GM Taori-Caring Friends Tribal Health Research Centre started.
30. Inspirational talk for MBBS students of Mumbai Nair college .
31. Dr. Ashish Satav was invited as chief guest for foundation day program of Govt. Medical College, Nagpur. His speech motivated many young doctors.
32. Navsanjeevan meeting with hon. Collector, IAS. Solved problems of villagers.
33. Purchased medical and surgical equipment's worth Rs. 68 lakhs.
34. New hospital (Sant Vinoba Bhave children Hospital) (funded by Hon. Anu Aga, MPLAD) construction is over . Started function from January 2016.
35. Started Swami Vivekanand research centre in Nagpur.
36. Meeting with UNICEF team regarding malnutrition control in tribal blocks of Maharashtra.
37. Meeting with govt. health team regarding HBCC replication in 100 villages of Melghat.
38. Visit of 25 workers of NGO CCDT for learning our research of Malnutrition reduction.
39. Visit of Apoorva Bajaj, executive president of Bajaj Corp. Ltd. to MAHAN trust.
40. Visit of Sunil Limaye IFS, deputy chief conservator of forest department of Govt. of Maharashtra.
41. MAHAN has completed 20 years in Melghat and hence Thanks giving program and Brain storming session for review of work and future plan was conducted in Nagpur.
42. Visit of Sachin Sachdeva, India chief, Paul Hamlyn Foundation, UK.
43. Water filter distribution to 100 poor tribal by Emiryl and Calderyl (M.D. and chairman) and Rotary club Nagpur.
44. Visit of Mr. Shubham Mittal, D.G.M. and team of Bajaj Auto CSR.
45. Training of village health workers for Birth Asphyxia management with the help of CPAP machine by Dr. Nitin Chouthai , USA.
46. Inauguration of Jamanalal Bajaj & Dr. GM Taori Research Laboratory.
47. Caring friends annual meet in Lonavala and Mumbai.
48. Documentary film on MAHAN prepared by Anil Somaiyya and team.

8. e-Print And Electronic Media

Dr. Ashish Satav was invited as an expert on Mumbai Doordarshan for a program “Malnutrition problem” under the program Sapat Mahacharcha. The project activities were presented by Delhi Doordarshan, ETV Samvad, SAAM TV, NDTV, IBN Lokmat, etc. The work was published in the form of more than 100 news in various news papers like Times of India, The Hindu, DNA, Asian Ages, Hitwada, Lokmat, Sakal, etc.

OTHER COMMUNITY DEVELOPMENT ACTIVITIES

Various socio-economic status up-liftment activities like Employment guarantee scheme, Water supply schemes, repairing of road of few villages and S.T. Bus facilities have been started in many villages of Melghat by government due to our regular follow up. Admission of many students to schools was facilitated by us.

Due to our various activities like, UMANC Disaster Management work for providing food, cash and cloths to flood affected Harisal villagers (34 families) , *Des Bamboo training Centre for 25 tribal youths*, UMANC *gaonpanchayat for solving 17 pending problems*, the water shed management activities, Common Ganesh & Deepavali-festival celebration, KartavyaPurti Program, etc. There was improvement in living condition of hundreds of tribal.

REPUTATION OF THE INSTITUTION

9. Awards

1. **“Public Health Champion” award by World Health Organisation.**
2. REAL global award by Save the Children UK.
3. “Best Tribal Research Project Award & Young Scientist Award” by Indian Counsel of Medical Research,
4. Americares Foundation’s ‘Spirit of Humanity Award 2011 –National Award ’ for child nutrition.
5. Americares Foundation’s ‘Spirit of Humanity Award 2015 –National Award ’ for child health.

6. Angels of Rural India -Healers of India award to Dr. Ashish Satav by hands of Health Minister of India Mr. Naddha and WHO India chief Henk Bechedem in Taj palace Delhi.

7. Felicitation by Ex. President of India, Hon. Abdul Kalamji.



8.
9. Certificate of Merit by World CSR forum.

10. Oberoi melting pot award by Rotary International, Consulate Generals of 26 countries and Oberoi hotel.

11. Maharashtra Medical Counsel Award to Dr. Kavita Satav.

12. Felicitation by Jagtik Marathi Academy and Shivaji University, Kolhapur.

13. Felicitation of Dr. Ashish Satav in COMHAD International Conference.

14. Global Panaroma showcase

15. National Child Health Award for Nutrition by Lifebuoy.

16. Karmveer Social Citizen Action Global Award.

17. Guidestar India - Gold Transparency certificate to MAHAN.

18. Certificate of Merit by World CSR congress.

19. Central India Doctors Award for excellence in social work to Dr. Ashish by Chief Minister of Maharashtra (Devendra Fadanvis) and Union Minister NitinGadkari.

20. Felicitation by chief minister of Maharashtra.

21. The Suvarna Ratna National Award was given to Dr. Ashish & Dr. Kavita.

22. Dr. Dwarkanath Kotnis National Award and Savitribai Fuley state award.

23. Alex Memorial National Award.

24. State level community ophthalmology award from Maharashtra state Ophthalmology society by hands of Chairperson of Maharashtra Legislative Counsel

25. Dr. V.N. Vankar award for "Health & Hygiene" by Indian Medical Association.

26. Jamshetji Tata National Rural virtual fellowship.

27. Spirit of Mastek Award from Mastek Foundation, Mumbai

28. UvaunmoshPuraskar from Indradhanu, STAR Mazha and Maharashtra Times.

29. GodataiParulekar state award.

30. Shoorveer national award to Dr. Ashish and Dr. Kavita.

31. Yashwantrao Chavan award .

32. State award from Kolhapur Kusum Pratishthan was awarded to Dr. Kavita Satav.

33. Dr. Vasantarao Pawar Smruti award to Dr. Ashish and Dr. Kavita Satav at Nashik.

34. Kritadhyata Puraskar-2015 by Lata Education Society Pune was awarded to Dr. Ashish and Dr. Kavita Satav.
35. Dr. Ashish Satav was felicitated as chief guest for foundation day program of Govt. Medical College, Nagpur. His speech motivated many young doctors.
36. Award to Dr. Kavita Satav by Matru Seva Sangh Nagpur.
37. Sadhanati Amte award to Dr. Kavita Satav by VSS.
38. Dr. C.G. Gan oration award to Dr. Ashish Satav by Indian Academy of Pediatrics, Nagpur.
39. Vocational Excellence awards 2016-2017 by Rotary club of Nagpur.
40. Social worker award by Rotary club east Nagpur.
41. Felicitations by senior citizen of Nagpur.
42. M.B. Gandhi award.
43. Dr. Yavalkar award.
44. Samajseva Bhushan Puraskar.
45. Swatantravir Savarkar Samajik Samarastha award.
46. Dr. Wankar Mruti Tejswini Award to Dr. Kavita Satav in Nagpur.
47. Felicitations by Rashtrasant Tukadoji Maharaj Samiti, Wardha.
48. Karyanishtha Gaurav Puraskar to Dr. Ashish Satav.
49. Vocational award by Rotary club of Gandhi city.
50. Vocational Excellence award (Scroll of honour) by Rotary club of Pune.
51. Sevankur Idol.
52. Vishesh Karyagaurav Sanstha Puraskar.
53. Felicitations by LIONS club, Nagpur.
54. Dada Chandiramji Wadhwani Memorial Award (from Vidarbha Vaibhav.org.) to Dr. Ashish Satav.
55. Felicitations by SAAM TV and Sakal news paper.
56. Felicitations by Vivekanand Medical Mission, Khapari.
57. Felicitations by Vidya Niketan School, Amaravati by Ex. minister of central govt. Mr. Anand Adasule.
58. Felicitations by Centre point college, Nagpur

10. Testimonial Comments by famous person about the work

- i. 9/8/2019: Thank you so much for a wonderful experience at Mahan. The work that you do together with the community is impressive and a good building block for broader expansion. I am especially impressed by how you have worked to empower village members to provide sensitive, caring and quality health care, both treatment and preventive, to their community. The whole team – Ashish, Kavita and everyone else are

an inspiration. Very best wishes for continued success and work. Many thanks for your lovely hospitality. Regards. Dr. Padmini Shrikantiah, Senior program officer, BMGF USA office

- ii. 9/8/2019: Thank you very much for your kind and genius hospitality. The important work you do is very admirable and impressive. You inspire many and I hope you continue to succeed in all of your ambitious goals, your earnest and enduring family at Mahan wish you the very best. Regards , Prachi Vora , BMGF USA office
- iii. 'I had remarkable experience seeing the hospital and then visiting the research personnel (of MAHAN Trust) in their home in the village. This maternal infant project demonstrates the power of low tech investigations to decrease infant mortality. Our discussion with the research team here have informed me how to think about the project for the US National Institute of Health – Maternal Infant Research Network working with Dr. Archana Patel from Nagpur, we will get great value and stimulation from the brief visit. Thank you very much!' – Alan H. Jobe, MD, PhD, Professor of Pediatrics and researcher, Cincinnati Children's Hospital , Cincinnati, Ohio, USA.
- iv. Very impressive and humbling work and focus.
Dr. Ashish & Kavita. Look forward to stay in touch and hopefully working together one of these days. Dr. David Mukanga, Bill & Melinda Gates foundation, USA
- v. Your life and work inspire me greatly. Dr. Ashish is my Indian teacher. -Mr. Adam Kahane, Canada-International expert in problem solving.
- vi. Dear Team MAHAN & Brother Ashish,
The work you are doing is incredible. It is so good to see your programmatic approach to resolve some of the intractable issues. Your emphasis of data driven decision making, your thoughtful approach to get community support and engagement, your dedication to be relentless under these difficult conditions is really inspiring. Thank you for the privilege to visit your centre and observe the work you do. All the best in your future endeavours and really hope to stay in touch. Best Regards! Shreeram, Gates Foundation
- vii. News published in Delhi edition of Indian Express December 5, 2006 -Dr Naresh Geete, director (Monitoring), Rajmata Jijau Mission for Mother and Child Nutrition, the government body appointed to monitor health reporting and coordinate among the various agencies working for child and mother care, admits to under-reporting: "Satav is 100 per cent correct. We have asked our officers to improve reporting. Unless we report correctly, we won't be able to solve the problem." Government reporting has since improved in Satav's 19 intervention villages of Melghat.
- viii. Your work of home based child care program should be propagated all over India, said Dr. Katoch, Director General, ICMR and Secretary, Health Research, Govt. of India.
- ix. Dr. Satav taught us the real status of Malnutrition in Melghat admits Rajlakhmi Nayar (Program officer of UNICEF on nutrition for Maharashtra).

- x. Dr. Satav family is doing excellent work in Melghat. Their work reminds us Dr. Albert Shwaitzer. Their work will be helpful for overall development of Melghat. Said by Dr. PrashantGangal (M.D.- Chief trainer of Malnutrition reduction program of Maharashtra Government and UNICEF training program), Dr. Sanjay Prabhu (M.D.-Maharashtra state Secretary of Breastfeeding Promotion Network of India,), Dr. ShakuntalaPrabhu- Professor of Pediatrics- Wadia children Hospital, Mumbai.
- xi. The flipchart on Malnutrition, prepared by you is of an excellent quality and I recommend that govt. of Maharashtra should use it for their health education program. – Dr. L.P. Mishra, IAS,special rapporteur, National Human Rights Commission of India. He was impressed by our way of monitoring govt. Health & ICDS program in Melghat and scolded many govt. officers after reading our report.
- xii. Dr. Satav is an great asset for Melghat and district administration, said Dr. ShantaSinha , Chairperson, National Child-right Protection Commission of India.
- xiii. You are doing very good work at Melghat said Mr. Dhirubhai Mehta, President, Kasturba Health Society, Sevagram and director of Mahatma Gandhi Institute of Medical Sciences, Sevagram.
- xiv. I would like to take this opportunity to express my personal gratitude to you and your team of workers for leaving no stone unturned in order to ensure the complete success on the occasion – Dr. Mrs. P. Narang , Dean, Mahatma Gandhi Institute of Medical Sciences, Sevagram.
- xv. Dr. Satav's hard work, sincerity and dedication are praise worthy. He has travelled a lot in interior of villages by scooter and walked a long distances. He commands good respect with local leaders, Govt. officers and villagers of the area.- Dr. PrakashBehere, Prof. & Head of the department , Psychiatry, Mahatma Gandhi Institute of Medical Sciences, Sevagram.
- xvi. We are very much happy and satisfied after seeing the good project of Dr. Satav. During such a young age, it is not easy to avoid lot of attractions in life and live in such small village. Drs. P.R. Mhaskar& Kamal Mhaskar, Mhaskar trust, Amalner.
- xvii. I was very happy to visit your camps. The subjects you are discussing are very critical to the future of the people of India. Mr. Boffalme-USA.
- xviii. We are really inspired by the good work done by Drs. Ashish & Kavita Satav. Very few people like them realises their responsibility to serve for the motherland. To dream such work and to do it actually is really praiseworthy. - Dr. KanakNagale , Heart Surgeon from Nair hospital , Mumbai.

xix. The work they are doing is highly laudable. Selfless service given to people of tribal area seeing to all round development of an individual and also making them participate in the activity is a real great thing. Wishing them all success in their endeavour - Dr. C.J. Hemantkumar, Heart Surgeon (Cardiovascularsurgeon) fromJaslok hospital and Hindujahospital, Mumbai.

xx. "Shaileshnisal" shailesh.nisal@gmail.com something I wrote.....

Utavali, Dharni, INDIA.

Utavali means 'eager' in Hindi. Eager to work are the Satav couple, Eager to go there are people who have visited the place once. It is an example of what the human spirit can make happen. What the will of 2 persons can bring up from nowhere, from nothing. And where it is most needed. One can't but wonder why they do it? What takes a highly educated couple to a god-forsaken forest to deliver health care to people who live on nothing. It's a mission that is difficult to comprehend. Even more the fact that they put their life at stake, when there were so many comforts that could have been easily theirs. They are a creed apart; they come to this world to give, at the cost of time, comforts, family and their life. I salute them, the spirit that drives them. I salute their courage to do what they want to, and the guts to keep going.

Dr. ShaileshNisal, (M.B.B.S., M.S., M.Ch.) plastic surgeon, Nagpur.

xxi. I impressed upon the trustees of Love trust U.K. , the planned and systematic nature of your work with the tribals and my expectations that it will yield good results in the health of tribals and in particular in reducing mortality among young children up to the age of six. My wife and I were especially impressed by the concept of training village health workers. The lady village health worker to whom you introduce us in the village, and who spoke so clearly of her work diagnosing pneumonia and malaria is an excellent ambassador for your work. –Mr. Stephen Love, England.

xxii. We were convinced with your capacities to lead the project of children mortality control program. You definitely convinced me that the results of your work and your scientific research will have an important impact on the future of many people in the Melghat area. Now you have won this national price, and your research work is appreciated by national and international experts in community health, it will even have impact on many more people. Congratulations to you and Kavita also. She has also played such an important role! May be in future your results can even be used in Sierra Leone! - Dr. AnnekoosWiersinga(M.D.) ,StichtingGeron, Netherlands.

xxiii. I congratulate you with the award that you received at the symposium at Jabalpur. You certainly deserved it. Your work has been of great importance for the destitute tribal people of Melghat and I am happy and proud that we have sponsored this work. I vividly remember

that meeting in the garden of the heart hospital near Amravati. I am very happy that you convinced me there about the necessity of this work. The result has proved that you were right. Annekoos, Batiaan and Taco told me about their visit to Dharni and they told me they were very much impressed by the wonderful and dedicated work you are doing there by Nico Nobel, Netherlands.

- xxiv. Meeting you made me realize that “role models are neither historical nor in books- they are in ‘action’ in ‘here & now’”. I guess it’s just a beginning – Mr. Manish Shrivastava– National training manager –Hindustan Lever Limited, Mumbai.
- xxv. Dr. Ashish & Dr. Kavita Satav- you are simply great. I want to do lot of work for the tribal community. Your work will inspire me. Really envy you both. Mr. Sunil Limaye (IFS)- Additional Tribal Commissioner, Amaravati division.
- xxvi. Your work is like a temple said Dr. Taori, Neurophysician and Director, CIIMS hospital, Nagpur.
- xxvii. ‘The dedication and involvement of the MAHAN staff under Dr. Satav’s leadership and that of the community workers was truly impressive. The need to serve and in turn gain the respect of the community members is mutually beneficial and therefore sustainable. The measurable improvement in the health indicators, knowledge of the community members and their trust in MAHAN’s workers indicates that MAHAN is making a big difference in their lives. May they have the strength and conviction to continue this excellent work?’ – Dr.Archana Patel, HOD, Pediatrics, IGMC and VP, Lata Medical Research Foundation, Nagpur.
- xxviii. Awareness generation amongst tribal women & men of Melghat by your trust is praiseworthy. The efforts of Dr. Satav & team will be certainly useful for Melghat. Such training camps will produce Master trainers for social welfare department of Maharashtra government. Mr. RaghunathKulkarni- Divisional Social Welfare Officer, Amaravati division.
- xxix. The various camps organized by the trust is praiseworthy. The various health related activities done by the trust is useful for Melghat. Mr. Kapase , Project officer , Integrated Tribal Development Project, Dharni.

Dr. ASHISH SATAV (M.B.B.S., M.D.)

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