

# Operation ASHA Fighting Tuberculosis Worldwide

ANNUAL REPORT 2009-10 OP ASHA





# www.opasha.org

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#### A YEAR OF INNOVATION AND EXPANSION

Dear friend of Operation ASHA,

The 2009-10 fiscal year saw Operation ASHA rise to the forefront of tuberculosis treatment in India for its growing impact, innovation and consistently excellent results. Operation ASHA now treats more TB patients than any other NGO in India. Among the most notable developments:

- OpaSHA was elected to the Coordinating Board of the Stop TB Partnership housed by the World Health Organization, in the position of representing all NGOs from the developing world.
- Opasha became the first in the world to use fingerprint biometric devices to maximize treatment compliance for tuberculosis patients. Microsoft Research has partnered with Opasha to develop the technology and test its efficacy.
- OpaSHA developed a strong research partnership with the Jameel Poverty Action Lab at the Massachusetts Institute of Technology, which is conducting randomized control trials to assess OpaSHA's impact across several performance indicators.
- OpASHA's innovative model continued to produce outstanding results, including an exceptional default rate (the rate of patients defaulting on treatment), cure rate and mortality rate.
- OpASHA opened 20 new treatment centers across North India and set high projections for expansion in the upcoming year, with plans to begin replicating its model internationally in partnership with other NGOs.
- Opasha enrolled a total of 3017 patients in free comprehensive TB treatment and counseling, at a cost to Operation ASHA of only Rs. 1150 (\$25) per patient.

Each of these achievements would not have been possible without the generosity of Operation ASHA's supporters. Operation ASHA raised Rs. 11,081,359 this year (approximately a quarter of a million dollars) in private and corporate donations through fundraising events and online marketing.

We hope that the information in this report conveys the vital importance of Operation ASHA's work fighting tuberculosis, and the life-saving impact that each of our supporters has.

Dr. Shelly Batra

President, Operation ASHA

#### WHY TREAT TB?

Tuberculosis is relatively simple and inexpensive to treat. Yet the disease spreads rapidly in poor settings, where people are least likely to have access to



treatment. Inadequate treatment programs have led to the emergence of Multi-Drug Resistant TB (MDR TB) and Extensively Drug Resistant TB (XDR TB), now emerging as deadly and far-reaching epidemics.

In India and around the world, the benefits of treating TB extend far beyond the disease itself. Fighting TB is #6 in the Millennium Development Goals (MDGs), and current investments in TB have already helped to accelerate progress toward the MDGs overall by contributing directly to maternal and child health, reducing poverty, and addressing a major cause of death among people living with HIV.

India, where Operation ASHA focuses its work, has **3.5 million TB patients** - 25% of the world's total burden. 2 persons die of the disease every 3 minutes in India. On average, each patient infects 12 others before dying. The social stigma toward TB has its own consquences: 100,000 women with TB are thrown out by their families each year to die of disease and starvation, and 300,000 children drop out of school each year because they, or a parent, have TB. Lost wages due to TB amount to \$300 million per year, and the total loss to the Indian economy is \$3 billion per year.

**Around the world**, without dramatic increases in funding and political commitment between now and 2015:

- Over 50 million people will develop active TB.
- Over 10 million lives will be lost to this preventable, curable disease; over 4 million of them will be women.
- Millions of children will be orphaned needlessly.
- Over 2 million cases of MDR TB will emerge for want of proper care.
- There is a current global shortfall of nearly \$3 billion per year to fight TB.

Sources: The Government of India and the Stop TB Partnership.

#### **EXCEPTIONAL RESULTS**

Due to an innovative model that combines intensive counseling, performance-based salaries for counselors, biometric tracking and a dense network of treatment centers, Operation ASHA's treatment outcomes are among the best in the world. Results for the 2009/10 year for South Delhi, OpASHA's largest and most established project, are shown below.

#### **Default rate: 2.75%**

This compares to an average default rate of 11.75% for all other organizations treating TB during the same period in South Delhi. Default rate is especially important to monitor because patients who default on their treatment are highly likely to develop Multiple Drug-Resistant TB (MDR TB), usually fatal in the poor communities that Operation ASHA serves. MDR TB is the current emerging epidemic in India, as each patient with MDR TB infects 12 others on average before death. OpASHA's counselors have financial incentives to keep default rates as low as possible.

#### Cure rate: 89%

This exceeds the global target cure rate set by the World Health Organization of 85%.

#### **Mortality rate: 2.3%**

This rate is much lower than in neighboring areas, indicating that Operation ASHA's patients are being diagnosed and put on treatment earlier in the course of the disease.

#### Failure rate: 4.7%

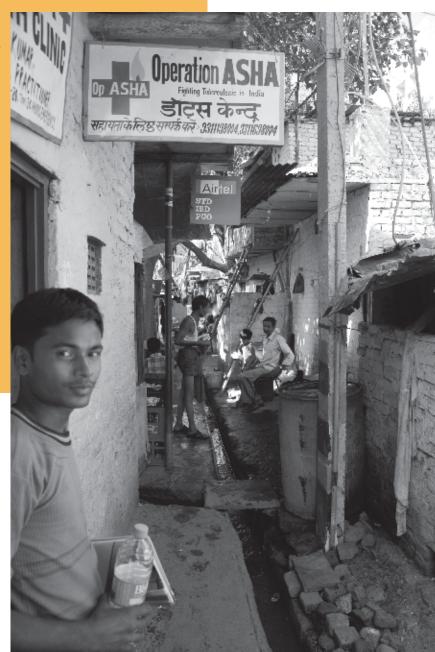
Failure occurs when the patient takes full treatment for TB but it fails to cure the patient, and usually results from drug resistance in the patient.



#### THE MODEL BEHIND THE SUCCESS

Operation ASHA's excellent results stem from its unique 14-point model, carefully researched and developed over several years.

- 1. WHO-sponsored DOTS therapy
- 2. Close coordination with RNTCP, the Government of India's national TB control program
- 3. Dense network of community treatment centers
- 4. Trusted community leaders and community healers employed as providers and counselors
- 5. Rapid-response testing and education of patients' immediate circle
- 6. Well-trained corps of local counselors
- 7. Provision of OTC drugs and camouflage to reduce stigma
- 8. Performance-based remuneration
- 9. Robust feedback loop
- 10. Stringent quality control
- 11. Very low-cost operating model
- 12. Sustainability within two years of opening each center via a government grant program
- 13. Biometric devices to track compliance
- 14. Franchise-like operation for easy replication



#### **EXPANDING OUR IMPACT**

This year Operation ASHA enrolled **3017 TB patients**: its highest yearly total of TB patients to date, and the highest number of patients treated by any NGO in India. 1.2 million people received comprehensive TB education in awareness camps and counselor community rounds.

Operation ASHA has been expanding its operations rapidly, enabled by its low-cost and highly replicable model. This year OpASHA opened 20 new centers across 4 states (Uttar Pradesh, Rajasthan, Punjab and Madhya Pradesh), and trained 20 new providers and 12 new counselors. Since the Government of India provides a grant to Operation ASHA for each patient it enrolls two years after the establishment of a center, Operation ASHA is limited in its expansion only by the amount of start-up capital available.

Operation ASHA now operates in 10 different cities (total population 27.6 million) across 6 states, as the exclusive provider of TB treatment for 1.5 million people living in 110 slums.

Beyond organic growth, Operation ASHA has been enhancing its impact through partnerships and building the capacity of other nonprofits. The Stop TB Partnership housed by the World Health Organization have analyzed and included OpASHA's model in a compilation of innovative health care models that will be published shortly. OpASHA has collaborated with the Prajnopaya Foundation both in running a joint program and in training their Program Manager to replicate OpASHA's model. Meanwhile, the Jameel Poverty Action Lab at MIT and researchers at the University of Colorado School of Medicine are analyzing OpASHA's effectiveness across several performance indicators, and the published results will be available to NGOs around the globe.



## PROJECTIONS FOR 2010/11

Operation ASHA has a bold schedule for the upcoming year, with plans to expand to several more states and more than quadruple its current number of treatment centers. By March 2011, OpASHA will have 200 centers in 15 cities and serve 5.5 million people. By 2012, it expects to serve a population of 24 million with 550 centers.

The following table details Operation ASHA's coverage in India in March 2010 and in October 2010 (the date of printing) respectively, demonstrating its rapid rate of expansion:

State	City	Total population of city (millions)	Number of centers: March 2010	Number of centers: October 2010
	East Delhi	0.7	3	3
Delhi	South Delhi	1	13	17
	West Delhi	0.7	2	2
	Bhopal	2.1	0	20
Madhya Pradesh	Indore	3	0	10
Mauriya Frauesii	Gwalior	1.9	0	19
	Jabalpur	2.5	2	22
	Amritsar	2.1	3	4
Punjab	Jalandar	2.1	2	2
	Ludhiana	3.3	6	4
Rajasthan	Alwar	3.5	3	0
Haryana	Gurgaon	0.3	1	0
Uttar Pradesh	Moradabad	4.4	8	8
Total		27.6	43	111

For the first time, Operation ASHA is also exploring opportunities for expansion to other countries. OpASHA is in advanced discussions with two organizations working in four countries in Africa and Asia that are interested in partnering for tuberculosis control.

#### SUCCESSFUL PARTNERSHIPS

#### Partnering for Innovation: Biometric Devices

Operation ASHA and Microsoft Research are now working together to make biometric technology a standard part of tuberculosis treatment. Biometric devices have been successfully piloted in several of Operation ASHA's centers in Delhi, and Operation ASHA is now starting the process of implementing the technology on a broader scale.

Biometric devices have the potential to minimize patient default rates and maximize cure rates by tracking patients throughout the treatment process. From the day a patient is enrolled in treatment, her fingerprint and other details are stored in the device at her local treatment center. Each time she arrives to take her treatment, her fingerprint is captured in order to leave an electronic confirmation that she has received her medication. At the end of each day, program managers and counselors are notified via an automated text message if any patients did not receive their scheduled doses, in which case counselors are required to track down patients within 48 hours to avoid treatment default and drug-resistance.

In addition to increasing patient compliance, biometric devices have several other advantages: improving accuracy, allowing data to be stored and generated electronically, increasing staff productivity, eliminating the possibility of staff tampering with data for higher incentives, and further standardizing Operation ASHA's process across centers for replication in other states and countries.

The devices are highly cost-effective, amounting to approximately \$2 per patient over the entire therapy of 6-10 months. At this stage Microsoft Research is fully funding the development of the technology, which Operation ASHA plans to eventually implement in each of its treatment centers.

#### **Identifying Best Practices with MIT Researchers**

Researchers at the Jameel Poverty Action Lab at the Massachusetts Institute of Technology are currently conducting two embedded experiments on Operation ASHA's model using randomization methodology. One experiment will measure the overall impact of the DOTS model (the TB treatment model promoted by WHO and used by OpASHA) and the relative roles of its individual components; the other will examine how Operation ASHA's practice of linking counselor salaries to performance outcomes impacts counselors' efficiency. Scientific evidence from these experiments will show Operation ASHA how it can maximize its impact, help the health community identify and adopt the most effective practices in TB control, and shed light on fundamental questions for development policy such as the role of information in health programs or the efficiency of community-level service delivery.

#### **Full List of Partners**

**BiGTech** assists NGOs in India by offering access to the software donor programs of its donor partners. In collaboration with Microsoft, BiGTech has provided Operation ASHA free software whose value amounts to more than \$30,000.

**Eli Lilly and Company** is a global pharmaceutical company based in Indianapolis, Indiana in the U.S. Eli Lilly funds Operation ASHA's work in Delhi and Gurgaon.

**GiveIndia** is a non-for-profit web portal that aims to improve credibility and facilitate fundraising for Indian NGOs. GiveIndia is highly selective and carries out exhaustive scrutiny of the NGOs it hosts, carrying out field visits to ensure compliance with a stringent set of credibility norms. Operation ASHA utilizes GiveIndia for fundraising purposes and participates in its giving challenges.

**HDFC Bank** was incorporated in India in August 1994, and currently has a nationwide network of 1725 branches in 780 Indian towns and cities. HDFC Bank funds Operation ASHA's work in India. **The LGT Venture Philanthropy Foundation** funds a variety of projects around the world that share the aim of sustainably raising the quality of life for people in the developing world. LGT works to ensure that its entrusted funds are allocated with maximal positive impact and transparency, and supplements its funding of Operation ASHA with rigorous oversight and continuous support.

**Institut Merieux** (formerly the Merieux Alliance) promotes innovation in medicine and public health across the globe, particularly in the fields of diagnostics, immunotherapy, and food safety and nutrition. The Institute funds Operation ASHA's work in India.

**The John and Editha Kapoor Charitable Foundation** supports a variety of causes from hospitals to higher education in India and the U.S. The Foundation funds Operation ASHA's work in Punjab, where John Kapoor spent his childhood.

**The Prajnopaya Foundation** is a worldwide humanitarian organization that supports innovative health, education and social welfare projects under the patronage of His Holiness the Dalai Lama. The Prajnopaya Foundation funds Operation ASHA's work in Moradabad, Uttar Pradesh.

**The Stop TB Partnership**, housed by the World Health Organization and composed of 1000 partner organizations, was established in 2000 to eliminate tuberculosis as a public health problem. Operation ASHA was recently elected to the Coordinating Board of the Stop TB Partnership, representing all NGOs working in TB control from the developing world.

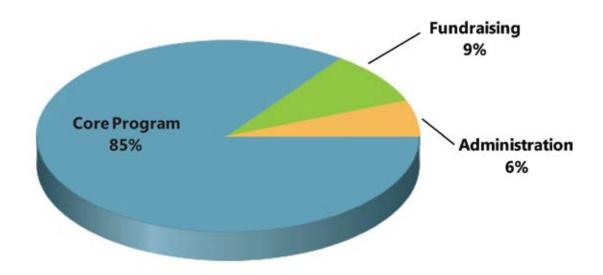


#### CONTROLLING COSTS, IMPROVING CARE

Operation ASHA has an extremely low-cost model, treating patients for the entire 6-8 months of their treatment for only \$30 each (in contrast to the more typical cost of \$300 at similar NGOs). This is due in part to OpASHA's cost-saving practices such as training local people as counselors rather than employing expensive doctors, and situating centers in the shops of providers to avoid rent costs. It is also due to OpASHA's close partnership with the Government of India, which provides Rs. 6422 in medicines, diagnostic services, and physician services for every Rs. 1152 invested by Operation ASHA. Thus every dollar donated to Operation ASHA is leveraged 6 times, and Operation ASHA is able to reach more patients in need of treatment.

For an average patient with an average number of work years ahead of him, the return on Operation ASHA's investment is Rs. 75000, or 65 times the cost of treatment. The return on investment to the Indian economy, which saves Rs. 60000 for every patient treated, is 52 times. Together, the total social return on investment is 11718%, or nearly 117 times Operation ASHA's cost per patient.

The following chart shows the breakdown of Operation ASHA's expenditures, with 85% of expenses dedicated to programming.



Receipts	Amount Rs.	Payments	Amount Rs.
By Opening Balance	257.74	To Postage	4,124.00
By HDFC Bank	539.74	To Misc Exp.	9,865.00
By HDFC Bank	57.77	To Repair & Maintenance Exp.	41,622.00
By Membership Fees & Donation	8,001,606.79	To Office Exp.	33,623.00
By Corpus Donation	3,000,000.00	To Power & Fuel	15,950.00
By Bank Interest	14,985.57	To Bank Charges	5,677.69
By Government Grant	79,750.00	To Printing & Stationery	24,647.00
		To TB Project Exp.	7,240,977.31
		To Health Project	65,095.45
		To FDR	1,500,000.00
		To Fixed Assets Purchased	852,447.78
		To HDFC Bank	9,630.03
		To HDFC Bank	1,282,170.07
		To Cash In Hand	11,370.28
	11,097,199.61		11,097,199.61

## ANNEX II. Income & Expenditure for the Year Ended on 31.03.2010

Expenditure	Amount Rs.	Income	Amount Rs.
To Postage	4,124.00	By Membership Fees & Donation	8,001,608.79
To Misc Exp.	9,865.00	By Bank Interest	14,985.57
To Repair & Maintenance Exp.	41,622.00	By Government Grant	79,750.00
To Office Exp.	33,623.00		
To Power & Fuel	15,950.00		
To Bank Charges	5,677.69		
To Printing & Stationery	24,647.00		
To TB Project Exp.	7,823,217.31		
To Health Project	65,095.45		
To Audit Fees	15,000.00		
To Excess of Income over Exp.			
Trf. To General Fund	57,522.91		
	8,096,344.36		8,096,344.36

#### ANNEX III. Value of Medicines & Services Obtained Free

Particulars	Amount US \$
Anti-TB drugs	693,254
Auxiliary drugs/supplies	16,757
Educational material	2,830
Physicians' services/diagnostics	82,718
Management	243,700
Travel	2,966
Total	1,042,225

#### ANNEX IV. Balance Sheet as of 31.03.2010

Liabilities	Amount Rs.	Assets	Amount Rs.
<b>Trust Corpus Fund</b>		Fixed Assets	
Opening Balance	451,000.00	Furniture	126,844.00
Add: Addition	3,000,000.00	Invertor	28,000.00
	3,451,000.00	Telephone Instruments	105,329.00
<b>Expenses Payable</b>		Computer	410,093.72
Expenses Payable	622,240.00	Car	331,975.00
		Other Fixed Assets	172,149.78
		<b>Current Assets</b>	
		Cash In Hand	11,370.28
		HDFC Bank	1,282,170.07
		HDFC Bank	9,630.03
		FDR	1,500,00.00
		TDS	18,120.00
		General Fund	
		Opening Balance	135,081.03
		Less: Trf. From Income & Exp. A/c	57,522.91
			77,558.12
	4,073,240.00		4,073,240.00

## ANNEX V. Misc. Financial Information

- Salary and benefits of the President: Rs. 3,60,000.
   Salary and benefits of highest paid employee (CEO): Rs. 4,10,000.
   Salary and benefits of lowest paid employee: Rs. 5,900.
   Remuneration and reimbursements to Board members: Rs. 3,60,000 salary for Dr. Shelly Batra, President College. dent. Other Board members: none.
- 5. International travel costs: Rs. 2,53,000 for Sandeep Ahuja, CEO, and Rs. 1,78,000 for Dr. Shelly Batra, President, for advocacy at international events, fundraising, and meeting with partners. 6. National travel costs: Rs. 875,512.
- 7. Financials are constructed on a Cash basis.

## ANNEX VI. Staff Distribution by Salary and Gender

Gross salary (Rs) plus benefits paid/month	Male staff	Female staff	Total staff
Less than 5000	38	25	63
5,000 - 10,000	6	3	9
10,000 - 25,000	2	1	3
25,000 - 50,000	3	2	5
50,000 - 100,000	0	0	0
Greater than 100,000	0	0	0

# ANNEX VII. Board of Directors

Name	Position
Padma Shri Dr. Vera Hingorani	Chairperson
Dr. Shelly Batra	President
Dr. Alok Agarwal	Treasurer
Suniti Ahuja	Secretary
H B Saxena	Member
Rajiv Makkar	Member
Rakesh Kumar Khurana	Member



