Phone Conversation between Operation ASHA (Dr. Shelly Batra, President) and GiveWell (Elie Hassenfeld and Wendy Knight)
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GiveWell: Can you give us an overview of your program and how it works?

Operation ASHA: Can I give you a brief history of the organization? I started out as an Ob-gyn surgeon – I was in public hospitals for several years, but when I joined a private hospital – I found that the poor were not welcome. I started Pro-bono work for the needy. My colleagues, the anesthetist and pediatrician would not charge, but the hospital would – about $100. I had a group of friends that would provide money for the services: medicines, fluids, etc. I also had well-off patients and one of them was Sandeep Ahuja and he's now CEO. Then I started working in the slums. I could do 5-8 surgeries every month, and sometimes I would go into slums and talk to the slum dwellers and provide whatever help we could, advice on medical issues, free medicines procured from pharma companies etc.

Sandeep went to get masters in the US, and we kept thinking about how we could leverage our work to maximize impact per dollar, and we settled on TB for several reasons. TB is the biggest health crisis in India. There are many other organizations focused on HIV/AIDS. Now, malaria was a big problem with stagnant water pools, but we thought it would be wasted effort trying to fight the city authorities to do their job better to clean up the water, and do the insecticide sprays.

We thought about polio, but polio has been done in very big way in India. Rotary network has done a great job and except for a few small pockets, polio has more or less been dealt with.

TB we found to be the biggest health crisis in India, with 2 million new cases per year. 25% of the world's burden of TB is in India. It's a matter of shame for us. Every year 100,000 women are thrown out of their families if they contract TB because of the fears in people's minds. Children sometimes have to take up jobs if a wage-earning parent comes down with TB. Also 300,000 children are thrown out of school each year due to TB. With that mindset, there is terrible violation of human rights due to TB. Children sometimes have to take up jobs if a wage-earning parent comes down with TB. It is a loss to the Indian economy in a loss of wages and in direct costs.

Another thing we found out was that TB is the poor man's disease. Many people are doing focused and aggressive TB work, but that's part of many other activities. The few people they take, they treat well, but the number of DOTS centers are few. With these challenges, I felt that TB was a great need in our country.

Another reason to focus on TB is that TB is one of the millennium development goals of the United Nations, and therefore many of the international agencies are focused on TB eradication. Because TB is one of these goals, the Government of India has an excellent TB control program, where each city is divided into zones, with centers doing free testing and providing free medicines.

So, we had a lot going for us and I realized we could leverage our dollars many times over because of free testing and medicines.

The BCG vaccine prevents a fatal form of childhood TB, but it doesn't prevent TB per se. All patients in India who have TB have had the BCG vaccine in the past. The only way we can reduce TB is through active case finding and treating a large number of patients.

In 2005, we had Operation ASHA incorporated in India and registered in the US as a 501c3. In 2006, we started our first treatment center in a slum in Delhi, the rag pickers colony.

There, we learned a lot of things and established best practices, such as distance from patients house to treatment center and the best times to have the centers open for treatment and more. TB treatment is a big challenge because the medicines aren't given for home consumption. The patients must go 60 times over a period of 6 months to receive treatment at a DOTS center. Many of the patients are in absolute poor and may have to choose between food for their family and receiving medications.

GiveWell: You have a 92% cure rate. How is that collected and what does it mean?

Operation ASHA: For TB, compliance and adherence to the full treatment regiment is necessary. You have to have complete treatment for 6 months. If a patient leaves in between they can get MDR-TB. The only way to prevent MDR is to ensure full treatment. Urban slums are the most challenging areas for missing doses – they are mostly migrant populations living in shanties. Urban slums people are often on their own with no family support or peer pressure. There is a high incidence of drug and alcohol abuse and people can move from one slum to another for work. For example, a whole group can move from one slum to another when a new construction job starts.

Criteria we measure are treatment completion rate, default rate, death rate, transfer out, treatment success rate (patients that are sputum negative at the end of 6 months) and treatment detection rate in the community. The government has strict measurement for this – Operation ASHA's detection rate is higher than the government's or WHO's guidelines.

We hired a team from slum counselors and opened DOTS centers in small shops, temples, etc. Whenever a patient is diagnosed with TB, they begin treatment at a local hospital. Then, the drugs are given to our counselor and put in a place close to their house, which serves as a DOTS centre, where they can go and get treatment form the counselor at a time that's convenient for the patient ensuring that the patient takes the medication. The counselors are given 120 rupees, close to $3 as an incentive for detecting patients. They also go door-to-door to talk about symptoms of TB and that you can get sick and infect other people, and they send suspects for testing. They are thus able to detect patients from the community they serve

We also study the cost, which is about $25 for the entire 6 months of counseling, maintaining the centers, counseling and follow up and evaluation.

GiveWell: How do you calculate that number?

Operation ASHA: There's a 1-time cost of $50 that is necessary to set up a center. Some of the other costs necessary to set up the center such as medicine, stationary and signage are paid by the government.

We pay the counselors 5000 rupees per month and each counselor is responsible for 2 centers. Each DOTS center takes care of about 90 patients per year. We add up all costs we pay in a year and divide that by the number of patients we serve. We don't want each center to have more than 60-70 patients.

GiveWell: Do you have any documentation on that which you can share with us?

Operation ASHA: Yes, I can share that with you.

GiveWell: I also noticed that you are doing a study on the incentives program with J-PAL is that correct?

Operation ASHA: Yes, they're studying our incentive based salaries. You can find out what we've done with them so far.

GiveWell: Is there a report we could see?

Operation ASHA: They have only one piece published so far so it would be best if you spoke to them directly, I can get that information for you. They are still carrying out their studies, which will take about 12-18 months more, then the results will be published for all to see.

So you would like information on the MIT study, the information on the cost calculation of $25 per patient and the default rate and other stats? We have an exhaustive information and data collection system. Our criteria are much more stringent and detailed. I can send you the reports we have and how we compile

them. The counselors collect data in the field and that will give you the information.

GiveWell: What is the connection between Operation ASHA and the Indian Government?

Operation ASHA: We're a public-private partnership to enhance DOTS. The challenge for patients is to go to the center and take the treatment under observation. It is the government policy to have 1 public hospital for patients and deep in the slums there should be accessible patient-friendly DOTS centers, but there aren't enough.

The number of DOTS centers are few; the locations are far from patients' homes. The patients would tell me before Operation ASHA started that they had to spend 20 rupees to travel to clinics to get medicine. But the day they go for the medicine, they're not earning at all.

So, the gap in the government system is not enough centers, and that's the gap we're trying to fill. The government model is this: the DOTS centre is open 10am-5pm, which are the usual business hours. This is the time the poor need to work and earn their living. Also, they have a big rush of patients. There would be 200 patients at a centre, who are swallowing the medicine, and inadequate staff members to care for those patients. Other NGOs would hire one person to work 10am-6pm and give medication, and that wasn't convenient for patients either. That is the time patients would need to go to work. Other NGOs would rent premises to run the DOTS centre, which escalated the cost of treatment.

Then, I went to look at a GLRA treatment center. In India they are working in TB because leprosy has been eradicated. Their model was very good. It was in a shop selling spectacles, which was open for long hours. Businesses in slums go for extended business hours. In one of our DOTS centres, the provider opens her premises and sells her artificial jewelry from 6:30am and sells as long as she's awake. Similarly, a priest in a Hindu temple goes from 6:30am to 9:30pm.

We found that at the GLRA treatment center in the shop selling spectacles, which was open from early morning to late at night, patients were finding it very convenient to get medicines there. There were parts of the model that had to be changed. They had one counselor who was an MD and lived far from slums and had no notion of who patients were. We realized that we should have a system of counselors who belonged to the community that they were treating, and they'd be able to work with patients and be better served to know where certain patients lived. Then the counselor can go door-to-door identifying patients. Our model was picked up from GLRA.

Operation ASHA's model is an extension of the governments program. If the government is the body, then Operation ASHA is the arms extending last mile

treatment to slum dwellers. .

GiveWell: The $25 is additional?

Operation ASHA: Yes, government provides free medicines. Patients go to the public hospitals and diagnostic centres for testing, free consultation by the Tb specialist, and to get the entire 6 months supply of free medicines allotted for them. The costs to OA are to establish DOTS centers and paying counselors and providers, for carrying out intensive counseling of patients, families and communities, and also for default tracking and active case finding.

GiveWell: Can you talk more about counselors' incentive payment?

Operation ASHA: They get credits for default tracking and case detection.

Default tracking is very important. It's better to not treat at all than to partially treat. Counselors are told that before treating you need to explain everything including the risks of MDR. They are told they need to carry out intensive counseling. We tell counselors that in spite of this, patients will stop. One reason could be side affects to medicines, like nausea. Another is fear: women may think husband will throw them out or worker thinks they'll be fired. Patients say I shouldn't take treatment because landlord will throw me out. The biggest reason for default is that when patients start feeling better after about 6 weeks, that's when default starts setting in.

So the counselors have to go and repeat the counseling at 6 weeks, and also whenever the patient misses the dose. When this happens, the counselor goes to the patient's house and repeats the counseling, and persuades them to come for treatment and brings them back into the center.

If a counselor has 0 defaults, he gets a bonus of 1200 rupees. If 1 patient has missed a dose it comes down, after three missed doses he doesn't get a bonus and after 3 months in a row, he's thrown out of Operation ASHA.

GiveWell: How do you deal with potentially false information from counselor?

Operation ASHA: Exactly the same concern I had and for a long time this was a problem. Initially we had no option, but to believe the counselor. Now what we have done is this. We are using technology to ensure compliance and prevent 'gaming' of the system by counselors. Microsoft research has been in India for 2 years developing biometric devices to track patients in the treatment center or in their homes. In 18 centers in South Delhi, we have the device installed. Counselors are carrying the same device when they go to a patient house for default tracking.

The biometric device is a 10-inch laptop with a finger print reader and dedicated

cell phone. Whenever a patient is enrolled, his fingerprints are taken and stored in a computer.

When the patient goes to a DOTS centre first he has to give the fingerprint. The Laptop gives a green signal and a text appears that the patient has logged in. Only then the patient is given the medication and swallows the dose. If a patient doesn't come in, the system will send the counselor and the concerned program manager an SMS that certain patients have missed doses. Then the counselor is responsible to go to patient's house within 24 hours, and repeat the counseling and give the medicine. When the counselor goes and takes the patients fingerprint, then we are reasonably certain that the default tracking has been done. There's no reason the counselor should go and take the fingerprint without giving the medicine.

In South Delhi, we have more than 700 patients registered with biometrics and the default rate is less than 0.5%. We are now looking to use biometrics in all our centers in India, and to make it text free for areas such as Cambodia and Africa. We are looking to scale our biometrics because the results have been so good

GiveWell: You also mentioned a case detection rate incentive?

Operation ASHA: For every new patient detected and enrolled in our program, a counselor gets 120 Rupees. Going to patient houses and testing family members has had great results, and because of this case detection goes up. Our patients live in shanties with no ventilation and cramped space, so if one has TB they all will get it easily.

Counselors also go door-to-door and talk about symptoms of TB, and persuade suspects to get tested. Counselors have to go and visit 5 families in a day.

Third, they carry out TB education camps in the community. The Government of India gives us money to buy tea and samosas. People come for food and listen to the talk on symptoms of TB. The counselors hand out cards with the address of the nearest diagnostic centre, where sputum testing can be done fro free. They also give their contact number (they all have cell phones) or an address, and tell the people that they can meet up later, and everything will be done discreetly.

GiveWell: What's the process?

Operation ASHA: TB can be in the lungs(Pulmonary TB), or other parts of the body (extra-pulmonary TB). Lung TB cases can be “open cases’ i.e. those who are bringing up bacteria in the sputum, or they can be sputum negative, All cases of extra-pulmonary Tb are sputum negative. Those patients that are sputum positive are put on the medication right away - those who are having positive

symptoms but are sputum negative, those are taken to the hospital for a consultation with the Tb specialist who decides on the line of management.

The Counselor is responsible for going right to the sputum testing center and then go from sputum testing center to the TB hospital with the patients report, and to collect the entire 6 months medication for each patient, and then put the box in the nearest DOTS centre, where the patient can receive treatment. When this has been done satisfactorily, i.e. the patient takes his first dose and has been introduced to the provider – then it is considered a case detection.

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GiveWell: Often people will go outside the system to receive TB drugs, is that a problem that you've run into?

Operation ASHA: In the slums the first contact with a TB case is quack (or an RMP, Registered medical practitioner). These quacks do not want to lose their Tb patients, because they lose their earning from the patient and even the family. If someone in the family gets any disease, say, diarrhea, the quacks provide treatment so they don't want to lose this business. The TB treatment they are giving are grossly irregular, they may give only one or two drugs, for a short period of few weeks, all which is highly dangerous for it can lead to MDR TB

. We have enrolled quacks into the system by using them as DOTS providers. They are given the box of medicines, so that the patient will keep coming to them, which suits them fine. At the same time, TB treatment is being done according to the prescribed guidelines. This is how we are trying to overcome the problem to enroll as many quacks as possible as DOTs providers.

GiveWell: How does your data collection relate to the date collected by the government?

Operation ASHA: We do exhaustive, independent data collection, and we cross track our data with theirs – their guidelines are not as stringent as ours.

GiveWell: Who are the counselors you recruit? Do you know their professional backgrounds? Do they still do full-time work once they're counselors?

Operation ASHA: Our counselors have to have a high school degree and must have basic literacy. The counselors are from the slums and not working or working in other jobs.

One example, Priya, was working from 7am – 2pm in a primary school and working as an unpaid slave from 2pm-8pm and then would go home and cook for her family and earn 1200 rupees per month, ¼ of what she is now making.

With us, she works 8-hour days and is given a life of dignity and self-respect and when she goes around she's almost mobbed. She is treated like a physician in the community. She is very happy and proud. She's blossomed like a flower. Our attrition rate is almost 0 for our counselors.

We have a residential training facility in Delhi. If we want to start a program in Punjab, people come and we give them housing and food and 2-weeks training by government physicians and others. A lot of people are carrying out the training and we have a comprehensive training manual I can send.

At end of two weeks they have to pass a written test and do a mock counseling session, where thy are given the types of questions that counselors have to ask such as, "I share a blanket with four family members, what should I do?" and then they're sent into the field.

A lot have had jobs a lot have not – we get all types – one is a 45-year-old housewife, she is doing very well because of the confidence she exudes and her kindness. She has a very low default rate in her area.

GiveWell: We have seen a lot of programs go from providing medical care to other services? Have you thought at all about that?

Operation ASHA: Our focus has stayed TB because there is so much need and we don't want to be a jack-of-all-trades and a master of none.

We are focused on case finding, biometrics – all aimed to decreasing the cases of TB in world drastically – others are now using our last mile model in their work. For example the Government of India gives us 1kg protein powder for the severely malnourished. We give them to adults weighing less than 35kgs, we also use these as incentives for patients. We tell them that if you miss your dose, you wouldn't not be eligible for an incentive. TB Association of India gives us blankets and we use the centers to distribute to the poor and all these things are just to incentivize the patients

We were recently approached by the Michael and Susan Dell Foundation, and they were interested in giving nutrition products to children. Malnutrition, poverty and TB are inextricably linked and we are glad to use our pipeline for their program, but we are focused on TB.

GiveWell: Do you have TB stats for before you came in? For example, case detection pre and post operation ASHA?

Operation ASHA: The Government of India gives us existing statistics and what the existing rates are then we calculate our rates – we can send you that.

GiveWell: You mention that your program is going to be self-sustainable?

Operation ASHA: That is because of our partnership with the Government of India. Suppose I would buy medicines on our own, of course the costs would go up a lot.

The RNTCP gives the equivalent of $25 for any NGO that is registered with them as part of their public private partnership and will pay $25 for every treated patient. The government will need to audit paperwork but then eventually will give payment 2 years after patient begins treatment (because government takes 1.5 years to review paperwork).

We also tried to cut down costs – for example, using existing slum dwellers was a cost -cutting exercise that brought our costs down to $25 per patient. Every center after two year becomes self-sustaining. 8 of 10 in Delhi are already self-sustaining.

In 2006, the government grant was $15 and is going up to $25 and is keeping pace with inflation. The Government is so focused on TB treatment that this grant is not only going to continue but also going to keep pace with inflation.

We never have more than 60-70 patients at a center at any given time because it could be too big a rush. If that happens, we'd split a centre into two, and start a new center and treat surplus patients over there.

GiveWell: So are the only costs of the organization for counselors and creating centers?

Operation ASHA: We have a replicable system: For 8 counselors and 4 centers, we have a program manager. We are in 14 cities. In each city, we have to set up a small office and a program officer for each city. Administration and fundraising are less than 10%. About 80% goes to the core program costs, salaries of counselors and program managers and a small cost is training. Sandeep and I are leading our fundraising efforts in Delhi.

GiveWell: We are also interested in what you would do with more funding. What is the maximum you could take in and what would this look like in terms of more centers?

Operation ASHA: I read an article in Barron's about this, that donors don't want to waste money. They want value for the dollar. They want every penny used wisely and used in the core program, not frittered away.

The approximate cost to run a DOTS center is $4,600/year after which it becomes self-sustaining. This center will treat 90 patients in year 1, and 90 in year 2, and 90 year after year because of the self-sustaining model due to the

government grant.

Also, we're not just treating TB, but creating jobs for slum dwellers. They're the ones getting salaries and a better life. TB is one of most important poverty eradication programs in the world. There is a huge social return on investment, equal to 11700% on OpASHA's investment. Each treated TB patient earns approximately 150$ per year for the next 30 years, on an average. For every patient treated the country saves huge amounts in indirect costs to the economy. Tb treatment has long lasting social and economic benefits to the population, family and community.

We need funds most importantly for DOTS expansion; we need many more centers and want to work all over the country. We need to work in other high burden countries. There are 20 other countries where we need to step in. We already have 4 centers operational in Cambodia.

We also need more money for research on biometrics so it's text-free and can be used in other countries and in zero literacy areas. We will also need funding for developing our electronic medical records systems further. I also want to create an animation video of the training material and distribute it all over the world, one with no text, which has only icons or images that explain the disease. Most world leaders believe that there is a serious shortage of training materials and trainers as far as field work in TB is concerned.

GiveWell: Very specifically, the document you sent us indicated you need $300,000 this year to reach your goals, is that correct?

Operation ASHA: Yes, in order to reach our first goal for DOTs expansion. But that does not include funds for expansion in other high burden countries, and funds for developing biometrics and videos. My colleague has gone to Morocco to investigate programs there. The health minster of Morocco wants to start work over there though language may be a challenge, and will need a basic investment there. I would put it at $500,000 – $300K for basic DOTS expansion and I would add $200K to that

GiveWell: If you receive that $300K, how many new centers would that mean you would be able to create this year?

Operation ASHA: Close to 70 centers that would treat about 6,300 patients in the first year.

GiveWell: If you received $500K you would still create 70 centers but also spend some funds on researching biometrics and starting in other higher burden countries?

Operation ASHA: Simultaneously; we will need to build relationships in other

countries and do some upfront investment in other countries. We could be in operation in maybe 1-1.5 years if we start groundwork right away.

GiveWell: What is your thinking on expanding throughout other counties instead of doing more in India?

Operation ASHA: When we started in Cambodia, every one asked us this. There are several reasons.

1: We can't eradicate TB from the world just by living in our own homes. TB will go everywhere and if we don't attack the disease form all sides we can't contain it and we won't make much headway in the long-term vision of TB eradication.

2. The other reason is very mercenary, and you'll think I'm focused on money. We are part of the Stop TB Partnership. There is also a Global Fund to fight TB, malaria and AIDS. To be eligible for this money, we can apply from India, but there are many other organizations as well in India who are looking at the same funding stream. Thus our application may not go through. But if we worked in Cambodia or Ghana or Morocco, we'd be eligible to apply from there as well. Applying from other countries makes sense because if we get funding for another country we can scale there as well, while trying to get funding for India. It's a strategy for funding. So, this spreads out our work and doesn't put all our eggs in one basket.

GiveWell: Your funding goal for this year is about the same as last year. Do you expect to raise it from existing funders?

Operation ASHA: I think so. We've built bridges and cultivated relationships, and we've built a broad base of donors. Donors especially from Europe are making an active purpose to introduce us there to other donors. And, I'm traveling to Zurich and Amsterdam to meet their core clients.

Then, other fundraising streams are also opening up. We have just had a small event in Emory University Atlanta, and are now hiring a fundraiser to do this activity in major schools and colleges in the US. Then there's another group called My Hollywood Charity. This organization sells a gift and 25% of the proceeds go to charity, and they now want to partner with us.

So, I'm confident that we will be able to reach our gap.

GiveWell: One reason I ask is that our role is to find outstanding charities to recommend to funders and we want to find charities that may not get funding elsewhere.

Operation ASHA: The current funding stream will not do all we want– it will just meet our DOTS expansion. In order to scale our model, we want to invest in

technology - we will need interactive videos to train in other languages. We need to do research into biometrics and roll this out in Africa, and we want to train people but so much more is needed. Unless we have the investment to start now, we cannot expect to start in a year or 2.

GiveWell: Do you also have data from you core operational facility in Cambodia?

Operation ASHA: We just started there two or three months ago, but I can send you the budget and patient information.

GiveWell: Is the relationship with the Cambodian government different from the Indian?

Operation ASHA: Cambodia doesn't provide the $25 grant, but otherwise it is exactly the same as India, with a free public hospital and free drugs from WHO. So now we've submitted our application for the TB Reach grant, which is $370,000 and we are applying for the Global Fund grant. There isn't a self-sustaining model there.