



## Caring for two chronic diseases: Leprosy and Lean Diabetes At Jan Swasthya Sahyog

In the last five years 1350 new patients with diabetes and 700 patients with leprosy have been seen at JSS clinics. These chronic illnesses with myriad causations and presentations have the potential to cause various degrees of disability. They affect the patient's ability to work, while recurrent medical expenses may result in further impoverishing the family. In addition, leprosy carries the risk of infecting other members of the family.



Diabetes is commonly perceived to be a disease of sedentary lifestyle and obesity but in Central India it is a disease of the poor. Here, 75% of those with diabetes are non-obese with 45% patients being undernourished. As many as 29% have type 2 diabetes presenting before the age of 40 and 59% before the age of 50. Adivasis account for 22% of those with diabetes.

We at JSS have been struck by the large burden of diabetes and the need to understand this disease better in tribal areas. Contrary to western literature that suggests that 90% of type 2 diabetes is attributable to excess weight, we have to reconcile the levels of nutrition in our patients here. It is possible that there are different phenotypes of adult onset diabetes, and we speculate if under-nutrition related diabetes seen among tribal populace is a separate illness by itself.

### **We would like to offer:**

- Screening for complications of all those diagnosed through a standardized investigation protocol.
- Care of complications as well as anti-hyperglycemic treatment with either injectable insulin or oral medicines. Past experience shows that 50% of people with diabetes require insulin early in the disease.

### **Dukhni Bai**

*While doing back-bending work in the rice fields of Nevra, Dukhni Bai, a 36-year-old agricultural labourer, noted weakness in her legs accompanied by increased thirst and frequent urination. Despite having a good appetite she seemed to have been losing weight – she was diagnosed to have insulin-dependent diabetes at JSS.*

*Till then Dukhni Bai had earned a meagerly Rs. 40 a day (less than \$1) while her husband Jai Hari contributed Rs. 50 towards their family of three children and an ageing mother. When there was enough work at rice fields they could manage to eke out a living and even save a bit but from February to May there was scanty fieldwork. During such periods even dal and vegetables were struck off their daily diet.*

*The cost of treating a case of insulin-dependent diabetes averages about Rs. 1000 a month (\$20). As illustrated in the case of Dukhni Bai, medical treatment is the second largest source of debt in rural India. Dukhni Bai's family had to resort to taking advances from her employers for her treatment that deepened their state of deprivation. Dukhni Bai's hope is that she gets treated effectively for her chronic ailment and return to the rice fields that at least gave her a respectable means of livelihood.*

**A person cured of leprosy waiting to be reviewed**



A large number of people with leprosy who come to JSS are cases of misdiagnosis, treatment failures (inappropriate regime or premature stopping of therapy) or have progressed into deformities. Over 50% of such patients have lepromatous pole that has poor outcome. Those with presentations like - skin lesions, lepra reaction, anaesthesia, ulcers, and deformity - requires comprehensive care. Most patients are poor and the compliance and outcome of treatment can be improved by subsidizing the cost of comprehensive care, which would include:

**Correct and complete diagnosis including lab care**

- Appropriate treatment with steroid and other anti-inflammatory agents, and for the duration of 1 to 2 years depending on the type.
- Appropriate care for lepra reactions.
- Ulcer and anesthetic sites care, and other preventive care such as MCR rubber shoes and hand appliances.
- Ensuring referral to appropriate specialized institutions in the region for those who need surgical intervention.
- Treatment subsidy for indigent patients on long-term treatment that includes medicine, laboratory tests and treatment of complications.

**How you can contribute:**

- Sponsor a doctor: \$500 per month or \$6000 per year
- Sponsor nursing professionals: \$250 per month or \$3000 per year
- Sponsor the laboratory and clinic assistant: \$250 per month or \$3000 per year
- Sponsor the drugs: \$800 per month or \$9600 per year
- Sponsor the lab and surgical consumables: \$320 per month or \$3840 per year
- Sponsor administrative costs: \$250 per month or \$3000 per year

All contributions are welcome and we wish that the support pledged is for at least three years, if not longer.

**Pooja**

Thirty-year-old Pooja was running a high fever and had oozing, foul-smelling ulcers and at risk of losing her life when she was brought to JSS. She had spent months at two other hospitals and had found no relief. A health worker who saw her at JSS recalls: The treatment regimen for most patients who come to JSS is more effective than treatment elsewhere. For example, the drug Rifampicin that is given once or twice a month at other hospitals may be given for 15 days at JSS, a regime observed to be far more effective. In case an expensive drug or specific care is required, JSS makes it available by subsidizing the cost in the patients interest.

**To provide this comprehensive care we need:**

	Units	Total money in INR per year
<b>Recurring expenses</b>		
<b>Salaries</b>		
Doctors	1	3,60,000
Hospital Support staff	2	1,92,000
Laboratory Assistant	2	2,88,000
Nurse Senior	2	3,60,000
Nurse Junior	2	2,40,000
Clinical assistant for leprosy and diabetes	1	1,80,000
Sub total		16,20,000
<b>Non salary</b>		
Drugs, Investigation (HbA1c) and Treatment subsidy for Leprosy and Diabetes		6,00,000
Laboratory Consumables		1,20,000
Surgical consumables for care of complications in leprosy and diabetes		1,20,000
Subsidy for footwear in Leprosy and Diabetic patients		60,000
Communication costs for telephone, internet, etc.		60,000
POL		1,20,000
Sub total		10,80,000
<b>Total budget required</b>		<b>27,00,000</b>
<b>In US dollars</b>		<b>41500</b>