

# Role of nutritional support in improving treatment outcomes among MDR TB patients – Damien Foundation Experience

### **Background:**

Multi Drug Resistant Tuberculosis (MDR TB) is closely linked with poverty and under nutrition. Many patients cannot afford to have adequate food due to loss of income and catastrophic health expenditures. There is very limited evidence available to suggest that nutritional support in addition to standard MDR TB treatment, improves treatment adherence and outcomes.

#### Intervention:

Damien Foundation is providing nutritional support worth 6 USD to poor and needy MDR TB patients in the form of rice, wheat, cereals, egg, cooking oil etc once in two months till completion of treatment. In 2012, nutritional support was given to 51 MDR TB patients in south west Delhi and six districts of South Andhra Pradesh in India. Treatment outcomes for those who received nutritional support along with those who didn't was retrieved from MDR TB register and analyzed.

#### **Results:**

In 2012, 206 MDR TB patients were registered for treatment in South West Delhi and six districts of South Andhra Pradesh. Among them 51 (25%) patients was identified and received nutritional support. Analysis of treatment outcomes showed higher treatment success rate of 74.5% (38/51) among those who received nutritional support along with standard MDR TB treatment compared to 39% (61/155) among those who received only standard MDR TB treatment. Only five patients (10%) who received nutritional support were lost to follow up compared to 48 patients (31%) among those received only standard treatment.

	No of MDR	Treatment	Died	Failure	Lost to	Transfer	Switched to	Under
	TB cases	success rate			follow up	out	XDR TB	treatment
	registered						treatment	
Nutritional support with standard MDR TB treatment	51	38 (74.5%)	4	2	5 (10%)	1	1	0
Only standard MDR TB treatment	155	61 (39%)	30	5	48 (31%)	3	6	2
Total	206	99 (48%)	34	7	53 (26%)	4	7	2

## Conclusion

Providing nutritional support in addition to standard MDR TB treatment for patients is likely to motive them to complete treatment and reduce the default rate.