

**SURVIVORS**

Against TB

# India TB Summit

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Surviving TB in India:  
Nutritional care is essential and  
needs to be equitable and  
accountable

# Is Nutritional Assessment and Care essential?

- In PLWTB in India, wasting and undernutrition is (nearly) **universal**, **severe**, **often lethal** and **persistent after cure**
- **Universal**: > 85% of patients had BMI < 18.5 kg/m<sup>2</sup>
- **Severe**: 50% of men weigh less than 42 kg, and 50% of adult women weigh less than 38 kg
- **Lethal**: Increases risk of death, 2-4 fold.
- **Persistent**: weight gain of only 3-4 kg in absence of support against an average weight loss of 9 kg

# Is Nutritional Assessment and Care essential?

## Implications during Treatment of PLWTB

1. Extensive disease
2. Death
3. Drug toxicity, Default
4. Drug malabsorption
5. Delayed sputum conversion

## Implications post-treatment

1. Persistent undernutrition.
2. Poorer functional recovery, return to livelihood
3. Higher probability of lung impairment due to extensive disease
4. Higher risk of Relapse
5. Higher risk of post-TB treatment excess mortality

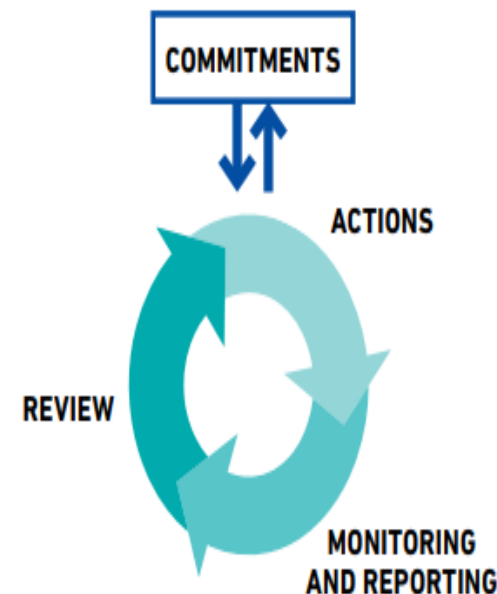
***Higher risk of TB in Household contacts in presence of food insecurity***

# Is it essential

**Guiding principle 2:** An adequate diet, containing all essential macro and micronutrients is necessary for the health and well-being of all people, including those with TB infection and TB disease

**Guiding principle 3:** Because of the clear bidirectional causal link between undernutrition and active TB, nutrition screening, assessment and management are integral components of TB treatment and care

Fig. 1. Essential components of an accountability framework



# Initiatives in India

Ministry of Health & Family Welfare  
Government of India

DOTS

World Health Organization  
India

### Guidance Document: Nutritional care and support for patients with Tuberculosis in India

Central TB Division  
Directorate General of Health Services  
Ministry of Health and Family Welfare  
Government of India, New Delhi

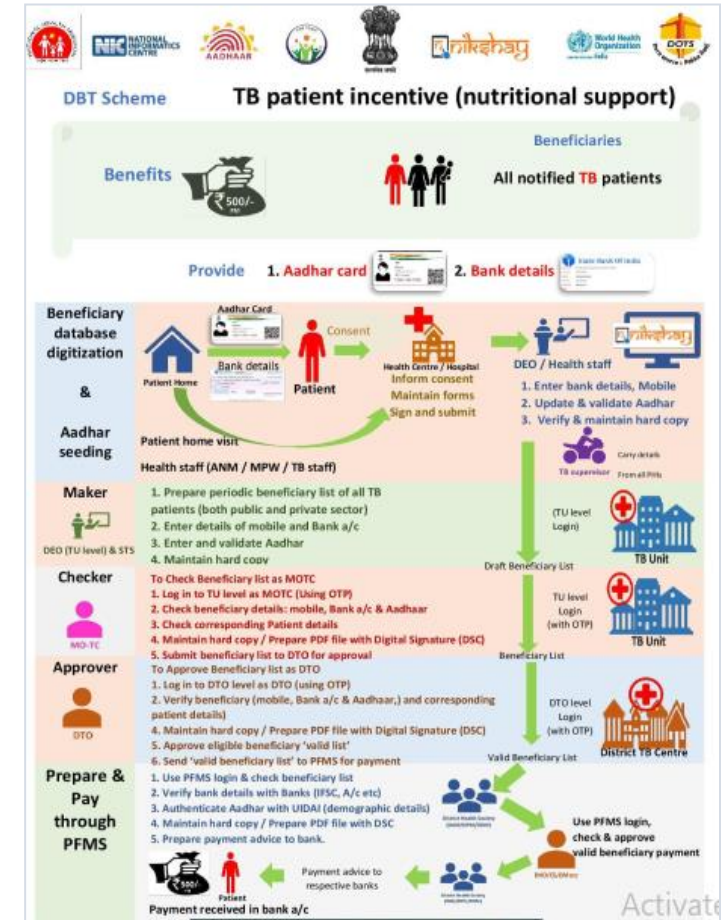
World Health Organization  
India

## N-TB

Simplifying the Nutritional Care of Adult Patients with Tuberculosis

**GET STARTED**

CNS  
YENEPVOVA  
McGill International TB Centre



Bhargava A, Bhargava M et al Indian J Tuberc. 2019.

# The suggested nutritional care pathway in India in the Guidance document

Assessment of nutritional status

Education and counseling patients regarding diet

Nutritional support (community based, in-kind), inpatient care for selected patients

Monitoring for clinical and nutrition related outcomes



# Nutritional assessment and counseling: a glimpse from South India

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## Nutritional assessment and counselling of tuberculosis patients at primary care in India: do we measure up?

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PHCs used mostly  
bathroom scales

32% used markings on wall  
for measurement of height

76% of medical officer  
made decision of patient  
being underweight by looks

65% prescribed protein  
powder

# Nikshay Poshan Yojana: DBT

Coverage?

Adequacy of  
amount?

Timeliness of  
disbursement?

# Nutritional support as part of comprehensive patient- centered care in India

## **Food support in kind:**

14 states have some kind of food support: dry rations, nutritional supplements. Often limited to patients with MDR-TB

**Study showed 50% decline in unfavorable outcomes.**

**Encouraging results in the USAID-supported MUKTI project (MP) and the ICMR –funded RATIONS trial (Jharkhand)**

**Need for in-patient care of severely undernourished patients.**





FIG 1. Images of patients with tuberculosis at Jan Swasthya Sahyog, October 2014

*National  
Medical  
Journal of  
India.  
2014; 4:  
228-229*

## **Marginalised communities, Women, people in remote rural areas**

- Require food support.
- Experience greater difficulty with DBT: lack of bank accounts, unlinked bank accounts.
- Require higher amounts, may require food support for longer duration.
- Rehabilitation services post-treatment are required.

# Need for accountability

- Need for counseling and capacity for care of undernourished patients.
- Need for monitoring and reporting mechanism for DBT.
- Need for evaluation of impact on nutritional, clinical and programmatic outcomes.
- Need for review of actions, and modification of strategy.

# Summing up

- Nutritional assessment and care is an essential component of TB treatment in India, and a scientific and ethical imperative.
- It should not be viewed merely as an incentive or enabler.
- Nutritional support is showing encouraging results in trial and programmatic conditions in India
- The current nutritional care pathway in India has gaps. The vulnerable need food support in kind as well as financial support.
- The program needs monitoring, reporting and review mechanisms for nutritional components

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# Thank You

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**Patients and communities who teach us everyday with their  
silent resilience in their times of sickness and vulnerability**