

NUTRITIONAL CARE AND SUPPORT FOR PATIENTS WITH TUBERCULOSIS

Tuberculosis (TB) is a contagious disease related to poverty, undernutrition and poor immune function. TB morbidity and mortality are highest in low- and middle-income countries.

IMPROVED NUTRITION HELPS PREVENT TB

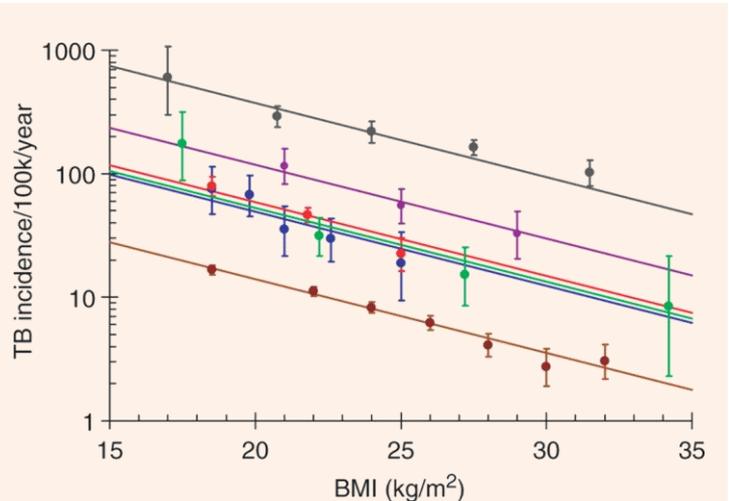
- Undernutrition increases the risk of TB (see graph).
- It is estimated that undernutrition causes about one quarter of all new TB cases globally. Improved global food security would greatly improve TB prevention.
- Nutritional support for undernourished persons with latent TB infection may reduce risk of progression to active disease. However, no proper trial has been done to confirm this.

NUTRITIONAL REHABILITATION IS IMPORTANT FOR PEOPLE WITH TB

- TB causes weight-loss and macro- and micro-nutritional deficiencies.
- The bi-directional association between undernutrition and TB leads to a high prevalence of undernutrition among people with TB.
- Proper TB treatment helps restore normal weight and nutrition. However, the time to full nutritional recovery can be long and many TB patients are still undernourished after TB treatment is completed.
- Proper nutritional care improves nutritional recovery for people who are undernourished, and therefore helps reduce future health risks.
- However, there is no good evidence that nutritional care improves TB-specific treatment outcomes, once proper treatment with TB medicines is provided.

FOOD SUPPORT MAY HELP IMPROVE ACCESS TO CARE AND MITIGATE CATASTROPHIC COSTS OF TB

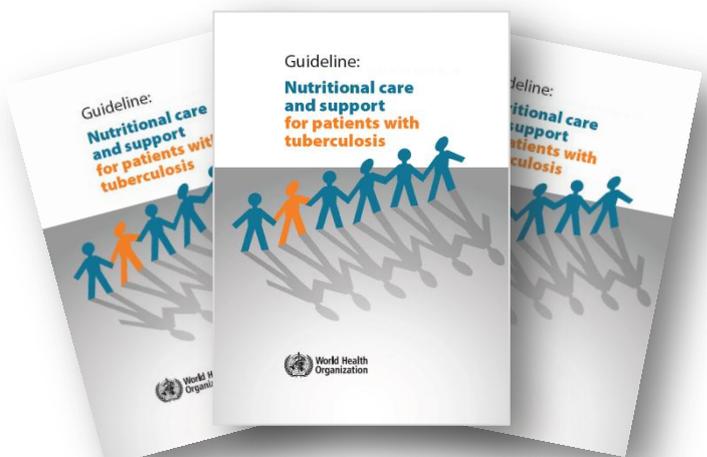
- Food-insecurity can be an important barrier for accessing and adhering to TB treatment.
- Catastrophic costs of TB illness and TB care can increase food-insecurity. There is often a vicious circle of underlying vulnerability leading to TB, and TB leading to aggravated vulnerability.
- The evidence on food support as an enabler for accessing and adhering to TB treatment is inconclusive. However, experiences suggest that food support is a critical component of enablers and social protection packages, especially in food-insecure populations.



The risk of TB increases with falling body-mass index (BMI)
 (Data from six countries with different background TB burden.
 Source: Lönnroth et al. Int J Epidemiology 2009; 9: 149-55.)

WHO RESPONSE

- WHO has developed a guideline on nutritional care and support for people with TB.
- WHO is in the process of assessing the evidence and develop policy on social support and social protection for people with TB and TB affected households, including food support.



Guideline: Nutritional care and support for patients with Tuberculosis. Geneva, World Health Organization, 2013
www.who.int/tb/nutrition
http://www.who.int/nutrition/publications/guidelines/nutritional_care_support_patients_with_tb/

WHO RECOMMENDATIONS ON

NUTRITIONAL CARE FOR PATIENTS WITH TB

ASSESSMENT AND COUNSELLING

- All individuals with active TB should receive a) an assessment of their nutritional status and b) appropriate counselling based on their nutritional status at diagnosis and throughout treatment.

MANAGEMENT OF SEVERE ACUTE MALNUTRITION

- School age children and adolescents (5 to 19 years), and adults, including pregnant and lactating women, with active TB and severe acute malnutrition, should be treated in accordance with the WHO recommendations for management of severe acute malnutrition.
- Children less than 5 years of age with active TB and severe acute malnutrition should be treated in accordance with the WHO recommendations for the management of severe acute malnutrition in children less than five years.

MANAGEMENT OF MODERATE MALNUTRITION

- School age children and adolescents (5 to 19 years), and adults, including lactating women, with active TB and moderate undernutrition who fail to regain normal body mass index after two months TB treatment, as well as those who are losing weight during TB treatment should be evaluated for adherence and co-morbid conditions. They should also receive nutrition assessment and counselling, and if indicated, be provided with locally available nutrient-rich or fortified supplementary foods as necessary to restore normal nutritional status.
- Children under five years of age with active TB and moderate undernutrition should be managed as any other children with moderate undernutrition. This includes provision of locally available nutrient-rich or fortified supplementary foods in order to restore appropriate weight-for-height¹.
- Pregnant women with active TB and moderate undernutrition or with inadequate weight gain should be provided with locally available nutrient-rich or fortified supplementary food as necessary to achieve an average weekly minimum weight gain of approximately 300 g per week in the second and third trimesters.
- Patients with active multidrug-resistant TB and moderate undernutrition should be provided with locally available nutrient-rich or fortified supplementary foods as necessary to restore normal nutritional status.



MICRONUTRIENT SUPPLEMENTATION

- A daily multiple micronutrient supplement at 1x recommended nutrient intake (RNI) should be provided in situations where fortified or supplementary foods should have been provided in accordance with standard management of moderate undernutrition, but are unavailable.
- All pregnant women with active TB should receive multiple micronutrient supplements that contain iron and folic acid and other vitamin and minerals according to the United Nations Multiple Micronutrient Preparation¹ to complement maternal micronutrient needs.
- For pregnant women with active TB in settings where calcium intake is low, calcium supplementation as part of antenatal care is recommended for the prevention of pre-eclampsia, particularly among those pregnant women at higher risk of developing hypertension in accordance with WHO recommendations.
- All lactating women with active TB should be provided with iron and folic acid and other vitamin and minerals according to the United Nations Multiple Micronutrient Preparation to complement maternal micronutrient needs.

CONTACT INVESTIGATION

- In settings where contact tracing is implemented, household contacts of people with active TB should have a nutrition screening and assessment as part of contact investigation. If malnutrition is identified, it should be managed according to WHO recommendations.

For more information please access: <http://www.who.int/tb/>