

numbers of patients receiving nutrition support were higher than number of malnutrition cases identified. 1.08% (1115) of the total 110015 TB patients reported were severe to moderately malnourished where only 3.90% of the total received support. Only 50% (12) of the interviewed DTLC's had clear understanding of the nutritional indicators, with 35% (8) having clear understanding of the relationship between TB and nutrition.

Conclusion: Integration of nutrition into the routine TB programming is a new concept in Kenya which requires clear implementation plans since after the roll out of the Nutrition in TB strategic guidelines and incorporation of the indicators it is clear that there is malnutrition amongst TB patients although the true burden is not yet known, knowledge gap in nutrition which needs to be addressed urgently and equipments to undertake nutritional assessment need to be procured for all treatment sites.

PS-101476-15 Household natural ventilation influences the risk of tuberculosis transmission

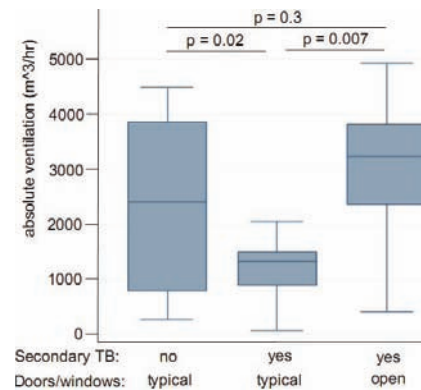
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Background: Ventilation is a key determinant of the risk of airborne TB transmission putting patients' household contacts at high risk of TB. We therefore studied the association between household ventilation and secondary TB incidence in a Peruvian shantytown.

Methods: For a case control study, homes were selected in which a primary case of sputum smear microscopy positive TB had ($n = 26$) and had not ($n = 30$) led to subsequently confirmed TB disease in at least one contact residing in the same house. Of these, 20 homes were excluded because structural modifications had been made in the median 3.5 years since the index patient TB diagnosis. Using a CO₂ gas tracer technique the absolute ventilation (AV) of each home was measured under two conditions: (1) 'typical', as the doors and windows were normally maintained at the time of diagnosis, and (2) 'open', with all doors and windows completely open.

Results: The AV was found to be significantly lower in homes with secondary TB than in homes without (median 1300 m³/hr vs. 2400 m³/hr respectively, $P = 0.02$). Homes without secondary TB had a wide range in AV (200–4500 m³/hr) whereas there were no homes with secondary TB and typical AV greater than 2050 m³/hr. Completely opening windows and doors in homes in which secondary TB occurred changed AV from median 1300 to 3200 m³/hr ($P = 0.007$),

increasing ventilation to a level similar to the homes in which secondary TB had not occurred. For a typical outbreak patient as defined by previous research, the TB transmission risk estimated by the Wells-Riley equation was 7.5%/day in homes in which secondary TB did not occur compared with 13%/day in homes with secondary TB ($P = 0.04$), which fell to 5.6%/day when homes had all windows and doors open ($P = 0.008$).



Conclusion: TB disease among household contacts was more likely in poorly ventilated homes. Opening windows and doors halved estimated transmission risk and thus may reduce TB disease transmission in TB affected house.

PS-100348-15 TB in a university hospital of Italy over ten years: clinical features and treatment outcomes

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Setting: Treatment outcome is a critical problem in TB management, so that WHO in 1993 recommended that the impact of TB control programs should be monitored and suggested to introduce surveillance in the treatment outcomes. In Italy, very few data about treatment outcomes are available, except prospective data from the WHO-AIPO initiative.

Aim: To describe the clinical features and treatment outcomes of all patients discharged from the Infectious Diseases Unit of the University Hospital of Pisa over a ten year period (1999–2008).

Design: A total of 220 patients diagnosed with TB were examined, 126 of them were males, 121 immigrants; median age was 50 years, a big part were far from Pisa area (104/220).

Results: In 94 cases there were at least one extrapulmonary localization, 82 were smear positive; 24 cases were HIV positive, in 6 of them a MDR strain was found. Eighty-four of them (38%) were lost to follow up one month after discharge (early lost). There was a significant association between early lost and the