

PS-100972-14 Risk factors of death from TB and other causes during one year after TB notification in Russia

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Background: Russia calculates tuberculosis (TB) mortality rate based on TB related deaths which were 58–59% of TB patients deaths happened in 2006–2008. Target impacts for prevention of TB patient death require evaluation of risk factors of TB patient death both from TB and other causes, as well as factors associated with a death happened during short time after TB notification.

Methods: Data of two groups of TB patients died in 2006 from TB (477 cases, 'T' group) and from other causes (286 cases, 'NT' group) in 3 Russian oblasts were analysed by univariable analysis and log-regression model to evaluate portion of deaths happened during year (DDY) after notification as a new TB case or relapse. Death certificates, autopsy protocols, and TB notification forms were evaluated and used also for validation of post-mortem diagnosis (TB or not TB) by four independent experts.

Results: Patients from T group more often than NT died during year after notification (62.7% and 52.8%, OR = 1.5, 95%CI 1.1–2.0). For T group DDY was associated with age >60 (OR = 1.9, 95%CI 1.1–3.3) and was prevented by 'working' and 'disabled' statuses (OR = 0.2, 95%CI 0.1–0.4) and OR = 0.4, 95%CI 0.2–0.8). While for NT group DDY was associated only with age <40 (OR = 2.7, 95%CI 1.5–4.9). Significant exceeding of portions of TB patients who DDY in T group vs. NT were found for age older 40, female and not alcohol-abused (OR = 2.6, 95%CI 1.8–3.7; OR = 2.4, 95%CI 1.1–5.3; OR = 1.4, 95%CI 1.02–2.0), opposite result was for working TB patients (OR = 0.3, 95%CI 0.1–0.9). Data validation has shown 2.2% disagreement with 'TB' and 3.9% with 'non TB' diagnoses as deaths causes.
Conclusion: Reduction of level of a TB patients' mortality, especially DDY, demands improvement of case-finding and etiotropic therapy, as well as effective treatment of concomitant diseases and social support of vulnerable patients which are significant portion of TB patients. Studied regions had satisfactory quality of post-mortem diagnostics TB as a cause of death.

PS-101380-14 Tuberculosis stigmatization is associated with disease concealment and poor treatment adherence

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Background: TB related stigma has been implicated in delayed testing, treatment intermittency and default, which increase the risk of secondary transmission and development of multidrug-resistant TB (MDR-TB). The objective of this study was to assess TB stigma as a possible mediator of poor treatment adherence in the high TB incidence shantytowns surrounding Lima, Peru.

Methods: This cohort study involved 2176 residents in TB-affected households: TB patients ($n = 710$) and their healthy household contacts ($n = 1466$) in 16 adjacent peri-urban shantytowns in Lima/Callao, Peru. Participants were interviewed in the final month of TB treatment. The survey instrument comprised of 22 questions concerning experiences of TB-related stigma in three domains: home, community and work. Principal component analysis was used to develop a stigma score. Poor adherence was defined as default or intermittent TB treatment.

Results: Experience of stigma was endemic among TB affected families (83% of patients and 77% of household contacts). Among patients, increased stigma in the home and community were associated with factors such as female gender (OR = 2.0; $P = 0.03$), lower income (OR = 3.8; $P = 0.01$), previous TB (OR = 1.7; $P < 0.01$), and MDR-TB (OR = 2.4; $P = 0.03$). In turn, stigma in the home and community was a risk factor for poor treatment adherence

