outcomes were adequate although 11/25 were lost to follow-up (did not attend their end of treatment consultation) including 5 prisoners (released or transferred).

Conclusions Treating TB in prisoners and homeless persons continues to be a challenge, even when DOT is undertaken. Tablet counting can help identify potential non-compliance in persons without obvious risk factors. In our experience, tablet counting is an effective and relatively cheap objective adjunct in the assessment of ATT compliance.

**Poster sessions**

**P168** SHOULD WE CONTINUE SCREENING HOUSEHOLD CONTACTS OF ALL INDEX CASES WITH TB IRRESPECTIVE OF INFECTIVITY? AN ANALYSIS OF CONTACT SCREENING YIELDS STRATIFIED ACCORDING TO INDEX SITE OF DISEASE AND SMear STATUS


10.1136/thoraxjnl-2017-210983.310

**Aim** NICE Guidance (2016) recommends that TB contact screening is only carried out on close contacts (household and workplace/school contacts) of patients with infectious tuberculosis (AFB smear positive) and laryngeal tuberculosis. However previous guidance recommended screening all household contacts of any index with TB irrespective of infectious status. The aim of this study was to look at the yields of contact screening amongst 3 groups of index cases- infectious smear positive pulmonary TB, smear negative pulmonary TB and extrapulmonary TB.

**Method** We analysed our records for contact screening of index cases with tuberculosis notified between January 2011 and May 2016. Index cases were divided into pulmonary smear positive, pulmonary smear negative and extrapulmonary. Contacts were divided into close, casual and workplace. The screening yields for each population were compared.

**Results** Between 1 st January 2011 and 31 st May 2016 1887 contacts of 408 notified index cases with TB were screened; 1109 were screened as contacts of smear positive pulmonary TB, 176 contacts of smear negative pulmonary TB, 506 contacts of extrapulmonary TB, the remainder the index site of disease was not specified. CXR screening was performed on the 510 contacts over the age of 35 (2011 guidelines). Patients 35 and under had 2 step immunological assessment with Mantoux and IGRAs. There was a strong correlation between size of Mantoux response and IGRAs positivity; 6% of Mantoux < 6 mm, 23% Mantoux 6–10 mm, 40% Mantoux 11–15 mm, 55% Mantoux 15–20 mm, 84% Mantoux ≥25 mm. 604 contacts of index cases with AFB smear positive sputum were assessed immunologically – 123 (20.3%) were positive, 136 contacts of AFB smear negative pulmonary TB were assessed – 19 (10.5%) were positive, and 383 contacts of extrapulmonary TB were assessed – 42 (11%) were positive. 26 of 239 (11%) workplace/school contacts of infectious TB were positive, compared to 21.5% of close/casual contacts.

**Conclusions** Although contact screening yields for index cases with smear positive pulmonary TB are high, the results for extrapulmonary and smear negative pulmonary TB are not insubstantial. Our data would suggest that we should continue screening close contacts of all TB index cases irrespective of infectious status.

**P169** LATENT TUBERCULOSIS INFECTION SCREENING OF ADULT CLOSE CONTACTS IN LONDON: A COST-UTILITY ANALYSIS

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10.1136/thoraxjnl-2017-210983.311

**Background** The National Institute for Health and Care Excellence (NICE) guidelines in 2016 recommend tuberculin skin test (TST) at a 5 mm induration size cut-off for latent tuberculosis infection (LTBI) screening of adult close contacts of active tuberculosis (TB) cases. An alternative would be to use an interferon-gamma release assay (IGRA) which has a higher specificity, such as the QuantiFERON-TB Gold in Tube (QFT-GIT) or T-SPOT.TB (T-SPOT). We aimed to evaluate the cost-effectiveness of the screening and treatment of LTBI in adult close contacts with various combinations of these tests in a representative London cohort.

**Methods** Clinical data of adult close contacts of pulmonary TB cases who were recommended to receive TST and IGRA in a TB clinic in London between 2008 and 2010 were retrospectively reviewed. A Markov decision analytic model, using an NHS perspective and lifetime horizon, was used to compare costs and quality-adjusted life-years (QALYs) associated with 7 screening strategies followed by chemoprophylaxis: TST alone, IGRA (QFT-GIT or T-SPOT) alone, TST positive followed by IGRA, and TST negative followed by IGRA. Future costs and QALYs were discounted at 3.5% per year.

**Results** 381 asymptomatic close contacts aged 18 to 65 years were included in this study. The mean age was 35.2 years and the majority (75.3%) were BCG vaccinated. In the base-case analysis, QFT-GIT was the most cost-effective strategy with £6876 per QALY gained, compared to TST positive followed by QFT-GIT strategy. QFT-GIT alone averted 1.6 TB cases per 1000 contacts compared to TST positive followed by QFT-GIT.

**Conclusion** Of the considered testing strategies, the QFT-GIT alone is preferable for LTBI screening in adult close contacts of pulmonary TB cases in London.

**P170** NEW ENTRANT LATENT TUBERCULOSIS SCREENING IN THE UK: SHOULD THE SEARCH BE WIDENED?

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10.1136/thoraxjnl-2017-210983.312

**Introduction** Most Tuberculosis (TB) cases in England are the result of reactivation of latent TB infection (LTBI) in foreign-born immigrants. The Collaborative TB Strategy recommends LTBI screening in New Entrants, who have entered the UK in the previous 5 years, are aged 16–35 and from countries with a TB incidence of ≥150 cases/100,000 population. This is seen as cost-effective, but in contrast to National Institute for Health and Care Excellence (NICE) guidance, which recommends screening those aged 0–65 from countries with a lower TB incidence of ≥40 cases/100,000. This study evaluated how the two screening programmes compared.