

Conclusion Radiology remains a key component of TB diagnosis. In our hospitals, we have seen that even if TB is mentioned in the report differential, referral can be delayed without the correct referral pathway being recommended. In pTB, this can result in inferior treatment outcomes and a longer period of potential infectivity. We plan to introduce a specific radiology code with clear referral instructions to our multidisciplinary TB team for all patients with radiology highly suspicious of active pTB.

REFERENCE

1. National Institute for Health and Care Excellence (2016) *Tuberculosis* (NICE Guideline 33).

P219 BIOLOGIC THERAPY AND LATENT TB SCREENING. WHO SHOULD BE SCREENED?

PD Jewell, M Patel, P Costello, G Russell, J Friedland, OM Kon, L Martin. *TB service, Imperial College Healthcare NHS Trust, London, UK*

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Introduction and objectives The expanding range of biological agents presents a challenge to those responsible for latent tuberculosis infection (LTBI) screening. The aim of this study was to compare screening recommendations between the Summary of Product Characteristics (SPC) of the agents with the recently published European Society of Clinical Microbiology and Infectious Diseases (ESCMID) consensus document, and model the impact of these on the workload for a UK health-care trust.

Methods For all biological agents used in the UK, recommendations for LTBI screening were compared between the ESCMID consensus and drug SPCs. The impact on cost and workload for screening approaches were assessed for a health-care trust over a five-year period.

Results Eighty-six biological agents reviewed are available in the UK. ESCMID and SPC agree on screening requirements for 79 of these drugs (92%). ESCMID recommends LTBI screening for 21 agents, compared to 19 by drug SPC. ESCMID recommends screening for four agents that did not warrant LTBI screening according to the SPC. SPC recommends LTBI screening for vedolizumab, not recommended by ESCMID. Local trust guidance recommended LTBI screening for two agents, cladribine and fingolimod, without agreement from

the ESCMID statement or SPCs. LTBI screening was recommended for abatacept by both SPC and local trust guidance, but was not reviewed by ESCMID.

Over the five year study period, there were 3586 cases of 22 different biologic agents being used in the trust, in a total of 3213 patients. The most commonly used agents were adalimumab (n=657, 18.8%), etanercept (n=662, 18.5%), infliximab (n=488, 13.6%) and fingolimod (n=475, 13.2%). LTBI screening should occur in 635, 535 and 554 cases per annum according to trust, SPC and ESCMID guidance respectively. If trust, SPC or ESCMID guidance were followed, it would approximate to a cost for LTBI screening alone of £196,850, £1 65 850 and £1 71 740 per annum respectively (conservative cost of screening estimated at £310pp).

Conclusions This study demonstrates a lack of consensus and a high cost of LTBI screening for the expanding portfolio of biological agents. It also highlights the potential financial and workload implications using differing criteria for a UK health-care trust.

P220 STANDARDISING TB INCIDENT MANAGEMENT ACROSS A LARGE UK TB NETWORK

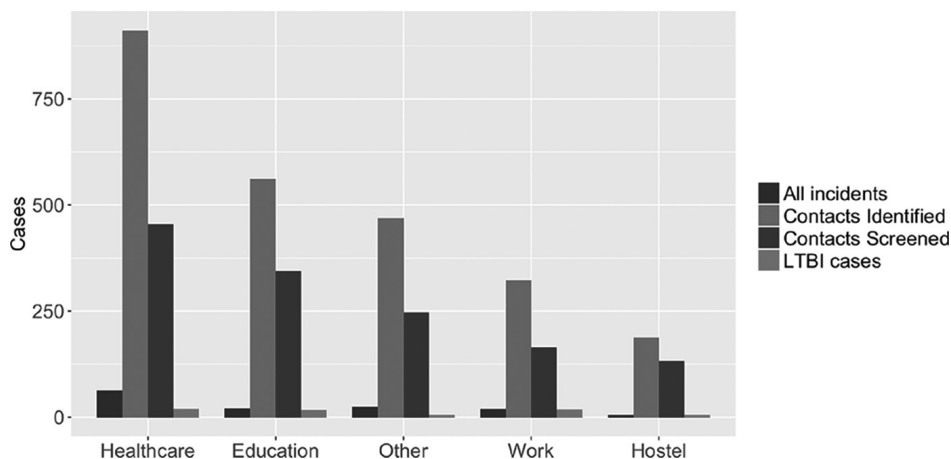
¹N Boparai, ²B Patterson, ¹J Dekoningh, ¹J White, ²M Lipman. ¹Whittington Hospital, London, on behalf of North Central London TB service, London, UK; ²Royal Free London NHS Foundation Trust, London, UK

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Introduction A key component of TB control is to identify potential transmission incidents following exposure to active cases. Appropriate risk stratification and screening of contacts can pre-emptively identify TB infections, and reinforce education and prevention messages. We report the use of a dedicated TB Nurse role to pro-actively manage incidents within a metropolitan TB network.

Methods Data on potential TB transmission incidents within the TB Network (TBN) were collected. Incidents were defined as a reported significant contact between an index case (pulmonary TB diagnosed by culture/molecular testing) and individuals *outside* the household setting referred to the local Public Health Unit. Incident management followed local guidelines.

Results Between 1.6.17 and 20.7.18, the TBN screening lead managed 148 incidents. 43.2% were in a healthcare setting



Abstract P220 Figure 1

(67.2% In-patient, 20.3% Emergency Dept, 10.9% Nursing Home and 1.6% GP surgery). The remainder were in the community: 14.2% educational establishments; 12.8% places of work; 3.4% hostels/homeless shelters and 16.9% other venues e.g. pubs, restaurants, shops, religious centres. 9.5% related to airline travel and were not assessed by our service. Following specialist risk assessment, 45.9% of our incidents required further management. 2450 non-household contacts were identified: 1344 were screened, 763 ‘inform and advise’ letters were sent, and in 343 investigation is on-going. A median of 12 (IQR: 5–20) contacts were screened per incident. 64 LTBI cases and two with active TB were identified. A median of 4.1% (IQR: 3.9–5.2) of screened contacts had latent TB infection (LTBI) across a range of settings (figure 1). 46 (71.9%) of the LTBI cases started treatment. In 2016–17, of 1389 non-incident close contacts screened in our network, 258 (18.6%) were diagnosed with LTBI, and 42 (3%) active TB.

Conclusion The large number of healthcare-related events, which are mostly in a hospital setting, following systematic non-household TB incident investigation is a concern. This highlights the need for on-going healthcare worker education regarding TB transmission and infection control. The yield of new LTBI cases in schools, colleges and places of work provides the opportunity for a ‘teachable moment’ in community settings which can be facilitated by the TBN screening lead.

P221 UNDERSTANDING PATIENTS’ PERCEPTIONS AND EXPERIENCES OF DIRECTLY OBSERVED THERAPY (DOT) FOR TUBERCULOSIS TREATMENT WITHIN THE UNITED KINGDOM

¹D Thomas, ²RH Summers. ¹The Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust, Bournemouth, UK; ²Health Sciences, University of Southampton, Southampton, UK

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Introduction Patient adherence to medical intervention is vital for tuberculosis (TB) management to be effective. For patients with difficulty adhering to treatment, directly observed therapy (DOT) is commonly used. However, no single DOT protocol is known to be optimal and evidence suggests that as adherence to DOT is poor, it does not currently provide a solution. Calls have been made for TB policy makers to address the wider barriers to adherence and consider approaches that motivate patients. The first step to either improving the effectiveness of DOT or identifying more effective solutions is to understand the patient experience and issues surrounding adherence to DOT.

Objective To explore patient’s perceptions and experiences of DOT in TB treatment within the UK.

Method A qualitative, semi-structured interview design was employed. Eight patients from across Wessex who had received DOT as part of their TB treatment were purposively selected. Interviews were audio-recorded and transcribed verbatim. Data were analysed using thematic analysis and NVivo 11. Negative case analysis and peer review were used to enhance rigour.

Results

- Adherence and non-adherence to TB treatment was influenced by socio-cultural, mental health, employment and discrimination factors (figure 1).
- DOT seemed to be valued by socially marginalised patients’ for the support and social connection it afforded. However, those in employment feared DOT could lead to disclosure and social discredit.
- Patients perceived observing the swallowing of medication without additional elements of support to be of limited value.
- Patient accounts suggest TB Specialist Nursing teams evolved DOT to provide highly individualised expert care.

Conclusions DOT offers a degree of social connection and support for marginalised patients but often fails to tackle fundamental barriers to adherence such as mental health, addictions, housing and discrimination.

Practice implications All TB patients should be offered a choice of flexible patient-centred support. It is unrealistic for one team to address all the barriers to treatment adherence. Multi-agency responsibility for TB control needs to be commissioned and evaluated across the UK and not just in high TB incidence areas. A multi-agency approach should include mental health, housing, homeless, addictions, social and TB teams.

P222 INTERNATIONAL RESEARCH AND GUIDELINES ON POST-TUBERCULOSIS CHRONIC LUNG DISORDERS: A SYSTEMATIC SCOPING REVIEW

¹SC van Kampen, ¹A Wanner, ¹M Edwards, ²AD Harries, ³B Kirenga, ²J Chakaya, ¹R Jones. ¹Clinical Trials and Population Studies Department, Plymouth University, Plymouth, UK; ²International Union Against Tuberculosis and Lung Disease, Paris, France; ³Department of Pulmonary Medicine and Lung Institute, Makerere University, Kampala, Uganda

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Introduction and objectives Pulmonary tuberculosis (TB) is an important risk factor for chronic respiratory disease due to lung damage. Yet, the WHO End TB strategy does not mention post-TB chronic lung disorders (PTBLD) and

Theme	Description of Theme	Sub-themes
1. Adherence versus concordance	Relates to whether participants felt they were given a choice in supervision and the impact of this on their adherence to treatment	1. Negative emotions 2. Perceiving support 3. Disengagement
2. Engagement and disengagement	Describes what factors influenced engagement and disengagement from DOT and how these were overcome (or not)	1. Fear of relapse 2. Temptation 3. HCW support
3. Threats to and opportunities for social connection	Relates to the impact of DOT on social connection	1. Employment/unemployment 2. Mechanism for disclosure 3. Social interaction / support
4. Mental Health an overlooked issue	Explores whether mental health poses a threat to adherence	1. Existence of mental health 2. Benefits of treatment 3. Failure to recognise mental health

Abstract P221 Figure 1 Theme 1–4 and sub-theme overview