Methods: Intervention utilized- Treatment supporters (TS) and mobile clinics. Intention to provide daily DOT by TS. At the end of March 2017, 63 TS are assigned for 454 TB patients. Number of patients supported by one TS varies from 1 to 20 according to the ease of location and the amount of patient support required. MSF mobile clinic team consists of health extension officer and community health worker and TB patients are reviewed on monthly basis during their regular visit of Malalua and Ihu BMU as well as health posts in covering area. MSF is offering to the patients dinghy and bus transport to these health centers.

Results: Since commencing the activity multiple complexities have been noted

Training and supervision of treatment supporters who are very remote is difficult

Heavy workload on TS with multiple activities added

Patient's acceptance of TS in multicultural context

Emphasis on TS approach distracted from patient centred approach

Conclusions: The geographical difficulties in Gulf has led to using TS for follow up. This approach has shown some limitations. In such a context, to facilitate treatment adherence, an individualized approach accompanied by adequate patient education and counseling may be a more effective approach than TS for all.

A TRIAGE SYSTEM FOR THE EARLY DETECTION OF CHRONIC COUGH AMONG TB SUSPECTS ATTENDING A HOSPITAL IN BANDA ACEH, INDONESIA

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Background and Aims: One of the main strategies for the early detection of pulmonary tuberculosis (PTB) is through the screening of individuals with symptoms compatible with TB. In the hospital, people with symptoms compatible with TB have an opportunity to get proper diagnosis and treatment. Yet this opportunity is often missed. We hypothesize that a respiratory triage system recommended by WHO for prevention of the spread of respiratory infection at the outpatient department, can be improved to enhance early detection of TB. With this hypothesis an intervention study was conducted at Zainal Abidin Hospital.

The objective of this intervention study was to compare the proportion of patients with cough >2 weeks, offered sputum test and TB case detection rate before versus after a respiratory triage system introduced.

Methods: Before-and-after interventional study. Intervention; training of health personnel and setting up a respiratory triage system, to detect patients with >2 weeks cough and offering sputum test for acid-fast bacilli. Data from "exit poll" and central laboratory were compared before vs after the triage set up.

Results: After the intervention, sampled patients who visited the hospital were more likely to be asked on >2 weeks cough (85.3% vs17.9%). In the whole samples (99.2% vs 64.7%) among them have >2 weeks cough patients.

For TB detection, the changes were 39 positive results from 220 AFB tests of 61,871 outpatients to 55 positive from 365 AFB tests among 53,056 outpatients. The rates of sputum testing and TB case detection increased from 3.5 to 6.8 per 1,000 (OR=1.9, 95% CI=1.6-2.3) and 6.3 to 10.4 per 10,000 (OR=1.7, 95% CI=1.1-2.6) respectively.

Conclusions: Respiratory triage can significantly increase TB detection rate.

THE DIFFERENCE OF INTERFERON GAMMA LEVEL IN PULMONARY TUBERCULOSIS PATIENTS AND HEALTHY CONTROL IN MEDAN, INDONESIA

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Background and Aims: Interferon gamma is an important cytokine in the immune response against Mycobacterium tuberculosis. Interferon gamma activate macrophage to kill intracellular mycobacterium. The aim of this study is to determine the difference of plasma Interferon gamma level in Pulmonary Tuberculosis (PTB) patients compare to healthy control and factors associated with interferon gamma level.

Methods: This is a case control study. Fifty subjects were selected, including 25 PTB patients and 25 healthy control (non TB patients). Interferon gamma concentration was determined by an ELISA technique

Results: Interferon gamma level was significantly different in PTB patients compare to healthy control (p = 0.024). Mean ± SD Interferon gamma level was 317.2 ± 201.97 pg/ml in PTB patients and 213.5 ± 86.43 pg / ml in healthy control. Body Mass Index and age were not associated with Interferon gamma level.

Conclusions: Interferon gamma level was significantly higher in PTB patients than healthy control. Body Mass Index and age were not associated with Interferon gamma level.

Key words: Pulmonary Tuberculosis, Interferon gamma level, healthy control

DIAGNOSTIC VALUE OF INTERLEUKINS IN TUBERCULOUS PLEURAL EFFUSION: A SYSTEMATIC REVIEW AND META-ANALYSIS

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Background and Aims: *The ability of interleukins (ILs) to differentiate between tuberculous pleural effusion and other types of effusion is controversial. The aim of our study was to summarize the evidence for its use of ruling out or in the tuberculous pleural effusion*

Methods: *Two investigators independently searched PubMed, EMBASE, Web of Knowledge, CNKI, WANFANG, and WEIPU databases to identify studies assessing ILs in TPE diagnosis published up to March 1, 2016, with language restriction to English or Chinese. Study quality was assessed using Quality Assessment of Diagnostic Accuracy Studies-2. A random-effects model was used for the analysis and pooling of diagnostic performance measures.*

Results: *Thirty-eight studies met our inclusion criteria. Pooled sensitivity and specificity for chosen ILs were as follows: IL-2, 0.67 and 0.76; IL-6, 0.86 and 0.84; IL-12, 0.78 and 0.83; IL-12p40, 0.82 and 0.65; IL-18, 0.87 and 0.92; IL-27, 0.93 and 0.95; and IL-33, 0.84 and 0.80.*

Conclusions: *Some of these ILs may assist in diagnosis of tuberculous pleural effusion, though no single IL is likely to show adequate sensitivity or specificity on its own. Using ILs to diagnose tuberculous pleural effusion may be less expensive and invasive than current methods. Further studies should assess the diagnostic potential of IL combinations in pleura and serum.*