



INFECTIOUS DISEASES (BACTERIAL, FUNGAL, VIRAL, PARASITIC, INFESTATIONS)

## **EFFECT OF NIGELLA SATIVA EXTRACT ON BACTERIOLOGY PARAMETER OF MULTIBACILLAR LEPROSY PATIENTS RECEIVING MDT-WHO (THREE MONTHS OBSERVATION)**

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**Introduction:** New appropriate strategy, besides early detection and WHO-MDT treatment is needed. Adjuvant therapy has been thought to be more effective than MDT alone.

**Objective:** The aim of this study was to investigate the effect of Nigella sativa extract on bacteriology parameter of multibacillar leprosy patients receiving MDT-WHO.

**Materials and Methods:** It was a Double Blind - Randomized Controlled Trial study performed on 60 eligible multibacillar leprosy patients receiving MDT-WHO. Bacterial index (BI) measured using Ridley logarithmic scale, whereas morphology index (MI) measured as percentage of solid bacteria to all form of bacteria. This study was approved by Research Ethics Committee of Faculty Medicine, Diponegoro University/ dr. Kariadi Central Hospital, Semarang, Indonesia.

**Result:** There was no significant difference in BI proportion and MI proportion in the two groups after treatment. Average BI in month 2 and 3 tend to be lower than control although not statistically significant. There was significant difference of average BI decline between control and treatment group in month 2 ( $p=0.000$ ) and month 3 ( $p=0.005$ ). There was statistically significant difference of average MI and average MI decline difference between control and treatment group in month 1 ( $p=0,000$ ,  $p= 0.001$ , respectively).

**Conclusion:** This study demonstrated that Nigella sativa extract affected average MI and BI decline. Its efficacy as adjuvant therapy might be confounded by duration of MDT-WHO.

