

# ADVERSE REACTIONS FOLLOWING MASS DRUG ADMINISTRATION WITH DIETHYLCARBAMAZINE AND ALBENDAZOLE FOR LYMPHATIC FILARIASIS ELIMINATION IN WEST SUMATERA, INDONESIA

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**Abstract.** The Indonesian government has instituted annual mass drug administration (MDA) of diethylcarbamazine (DEC) and albendazole in filarial endemic districts in West Sumatera, Indonesia to control this disease but adverse drug reactions can influence the uptake of the medication by the target population. In this study, we aimed to determine the types and frequencies of adverse drug reactions to these two medications to inform the lymphatic filariasis control program in this area. Study subjects were interviewed and asked about demographics, when they took the medicines and any perceived adverse reactions. This cross-sectional study was conducted during April-November 2017 in two filaria endemic districts of West Sumatera: West Pasaman and South Pesisir. Of the 369 subjects in West Pasaman, 42.0% were males; the mean age was 28.7 years; 26.3% had adverse reactions. Of the 400 subjects in South Pesisir, 35.8% were males; the mean age was 34.6 years; 37.5% had adverse reactions. The most commonly reported adverse reactions were headaches (30.3% in South Pesisir and 19.2% in West Pasaman), vomiting (30.3% in South Pesisir and 19.2% in West Pasaman), abdominal pain (30.3% in South Pesisir and 19.2% in West Pasaman), and drowsiness (30.3% in South Pesisir and 19.2% in West Pasaman). None of the adverse reactions were severe. In this study, the frequency of adverse reactions to lymphatic filariasis treatment was high but none of the reactions were severe. Those receiving these lymphatic filariasis drugs need to be educated about these side effects and the benefits of treatment to optimize lymphatic filariasis control programs in the study area.

**Keywords:** adverse drug reaction, diethylcarbamazine, albendazole, filariasis, elimination, Indonesia

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