Lymphatic filariasis in Peninsular Malaysia: a cross-sectional survey of the knowledge, attitudes, and practices of residents

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Abstract

Background: Lymphatic filariasis (LF) is a major cause of permanent disability in many tropical and sub-tropical countries of the world. Malaysia is one of the countries in which LF is an endemic disease. Five rounds of the mass drug administration (MDA) program have been conducted in Malaysia as part of the Global Program to Eliminate Lymphatic Filariasis (GPELF) by year 2020. This study investigated the level of awareness of LF and the MDA program in a population living in an endemic area of the country.

Methods: A descriptive cross-sectional survey that involved 230 respondents (≥15 years old) living in the LF endemic communities of Terengganu state in Peninsular Malaysia was performed. Demographic, socioeconomic, and knowledge, attitudes and practices (KAP) data of the respondents were obtained using pre-tested questionnaires and were analyzed using SPSS software version 13.0.

Results: More than 80% of the respondents were aware of LF and the common symptoms of the disease. Moreover, about 70% of the respondents that were aware of LF indicated that it is a problematic disease. Approximately 77% of the respondents indicated that filariasis is transmitted by mosquitoes. Two-thirds of respondents preferred hospital treatment for illness; however, only 12% had participated and/or received treatment for LF during an MDA program. Only 35% of the respondents that participated in this research were aware of the MDA program that had taken place in the area. None of the respondents had knowledge of the drug used in the treatment of LF. The findings from this research indicated that there was no significant association between LF awareness and with gender, age group, educational status, occupation, or socio-economic status of the respondents (P > 0.05).

Conclusion: A good proportion of the respondents are aware of LF, its mode of transmission and symptoms, however they demonstrated a poor knowledge of MDA which took place in the study area. For greater understanding of LF in the Malaysian population, there is a need for an enhancement in the delivery of health education and information programs and mass mobilization campaigns in endemic communities.

Keywords: Lymphatic filariasis, Mass drug administration, Control program, Mosquito

Background

Lymphatic filariasis (LF), often called elephantiasis, is considered by the WHO as the second most common debilitating mosquito-transmitted disease caused by filarial parasites [1]. It is classified as one of the neglected tropical diseases (NTDs) by the World Health Organization (WHO) and is the second leading cause of permanent long-term disability in the world [1,2]. The prevalence of LF continues to increase, and LF is a major public health concern that is associated with significant socio-economic obstacles [3]. Recent estimates suggest that approximately 1.4 billion people living in 73 tropical and sub-tropical countries are at risk of infection [4]. It has been estimated that approximately 120 million people have been infected globally by the disease and that approximately 40 million have become incapacitated due to...