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Practicum Site:

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Ivermectin, Diethylcarbamazine citrate, and Albendazole (IDA) -Triple Drug Therapy for *Lymphatic filariasis* (LF) Elimination Program: Current roll-out in endemic countries and situation amidst COVID-19 pandemic

Importance: Lymphatic filariasis (LF) is a vector-borne neglected tropical disease caused by the nematode worms *Wuchereria bancrofti*, *Brugia malayi*, and *Brugia timori*, and transmitted by mosquitoes (*Anopheles*, *Culex*, *Aedes*, and *Mansonia*). Adult worms live in the afferent lymphatic vessels of humans and produce microfilariae that circulate in the peripheral blood. After ingested by mosquito, microfilariae develop into third stage larvae and infect humans when the mosquito takes a blood meal. LF affects over 120 million people in low middle-income countries in Asia, Africa, the Western Pacific, the Caribbean and South America. Diethylcarbamazine citrate (DEC) has been used for treatment of LF for over 50 years. The combination of DEC with albendazole (DA) has been shown to be effective in certain Southeast Asian, Caribbean, and South America countries. Adding ivermectin to DA for mass drug administration (MDA) in settings not endemic for onchocerciasis was more effective than DA. The MDA-IDA program has become more challenging in the face of the COVID-19 pandemic. The objective of this practicum project was to develop a summary of each country that has implemented IDA mass treatment for LF elimination program.

Methods: Using 2017-2020 information housed within the Mectizan Donation Program (MDP), descriptions of country profiles, epidemiology eligibility, surveillance data, and progress report were developed.

Results: Of 75 LF endemic countries globally, 49 still require mass treatment, and only three have yet to implement mass treatment against LF. Approximately 15 countries are likely to consider IDA implementation, and 11 have implemented IDA combination treatment.

Conclusion and Recommendation: Some countries treated their entire LF-endemic zone from the beginning of IDA implementation; some countries experienced great renewal of program excitement in implementing IDA, despite concerns that the increased number of pills would deter some people. Most countries would expect not to need a third year of IDA treatment and are required to submit detailed impact information if requesting a third year of treatment. The current pandemic has delayed surveillance activities, and some countries are considering how to maintain program activities and prevent gaps in treatment where needed.