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Awareness on Lymphatic Filariasis: A Chain continues for Elimination.

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ABSTRACT:

Objective: A survey was conducted to know and spread awareness in people of village Kharsad, Navsari district on various aspects of Filaria, like causative organism, basic treatments, tendency to consume tablet and to know if they have seen any cases which is also helpful in estimation of disease burden in particular area. This survey was conducted with an intention to support government Filaria elimination program.

Methodology: A deliberate questionnaire and pamphlet on awareness was prepared with the help of clinical pharmacist and Physician. Communicated and received fully filled 100 forms and dispatch pamphlets on disease awareness with an initiative to person to person communication spreading awareness. A percentage analysis for each question was carried out.

Results: 55% aware about the lymphatic Filariasis. 15 % people were aware about the cause of spreading and it's contingency. 98% people have received annual medication from nurses as per government annual elimination program out of which 90% people have consume the tablets. On a purpose of studying epidemic of disease 4% people have answered that they have seen the cases of Filaria. 90% people have shown willingness to know about the disease and assured to help in spreading the awareness to others.

Conclusion: From the result on awareness on Filaria in village was around 55% but still the medication taking behavior is 90% which is good but low percentage in awareness within people can be improved by the awareness programs regularly like this to support the government.

Keywords: Lymphatic Filariasis, Awareness, Kharsad, Navsari

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INTRODUCTION:

Lymphatic Filariasis is one of the oldest debilitating neglected tropical diseases in the World. Lymphatic Filariasis which we also known as elephantiasis in general population is mostly a disease of tropical countries which is caused by nematodes a types of parasitic worms.^{1, 2} Infection occurs when filarial parasites are transmitted to humans through culex mosquitoes. Infection is generally acquired in childhood causing hidden damage to the lymphatic system. Lymphatic Filariasis is world's second most leading cause of long term disability. It does not kill but it can cause disability and impose social and financial burden to patients and his family members. Over 100 million people in 83 countries are infected with this parasitic disease. India, Bangladesh, Nigeria and Indonesia alone contribute 70% of infection worldwide.^{1, 2} In India almost 20 states and 90 million in urban and 252 in rural parts are exposed to infection.^{1, 2} As we know in 2000, World Health Organization launched its Global Program to Eliminated lymphatic Filariasis with an initiative of eliminating the disease as a public health concerns. In 2012, the World

Health Organization Neglected Tropical Disease roadmap reconfirmed the target date for achieving Lymphatic Filariasis elimination by 2020.¹ The elimination strategy has two components: I) to stop the spread of infection and II) to alleviate the suffering of affected populations to control morbidity. For implementation of elimination strategy Disease burden estimation, mapping and stratification background surveillance to prevent resurgence and advocacy and social mobilization are the main components.^{1, 2}

There are various common aspects on which if population becomes aware the parasitic infections can be avoid by frequent mosquito bites.^{1, 2} People need to take the necessary precaution when travelling to areas where the disease is endemic. Always sleep under a mosquito net. Try to avoid areas where standing water is present. If possible than Limit your outdoor activities to time after dawn and before dusk. Wear long sleeves shirts, long pants and socks to avoid exposure to mosquito. Use a mosquito repellent on exposed skin to prevent biting. Generally standing water and open gutters are the main places where the breeding takes place. So, Maintain Good sanitary conditions. *Wuchereria bancrofti* and *Brugia Malayi* is nematodes parasites causing lymphatic Filariasis. Mosquitoes are infected with microfilaria by ingesting blood when biting an infected host. When the infected mosquitoes bite people, mature parasite larvae are deposited on the skin from where they can enter the body. The larvae of the parasite than migrate to lymphatic vessels where they make a nest and develop into adult worms, thus continue the transmission cycle.^{1, 2}

All ages and genders are susceptible to disease infection. The infection increases with age and reaching a peak between 20 and 25 years. Clinical symptoms are lymphangitis, abscess with severe pain, lymphadenitis and tenderness. Lymphoedema, hydroceles, elephantiasis and chyluria are symptoms of chronic stage disease.¹⁻³ These patients are not only just physically disabled but they also suffer psychosocial and economical problems. Mass drug administration is the primary intervention to interrupt transmission. Most of this program is once yearly- administration of single dose of two drugs given together. The following recommended drug regimen must be needed to administered once a year for at least 5 years, with a coverage of at least 65% of total population.^{1, 2, 4} These programs promote the benefits of the intensive local hygiene

intensive local hygiene practice as well as the prevention of the debilitating and painful episodes of inflammation. Eliminating lymphatic Filariasis can prevent unnecessary suffering and contribute to reduction of poverty and help in economy. Various efforts have been taken by the national and state governments along with World Health Organization, towards the elimination of Lymphatic Filariasis in India. In India Mass Drug Administration is an economic option and our health care system is capable of operating the program but a study indicates the main limitation is a comparatively poor coverage of drug distribution and consumption in urban areas of country.^{5, 6}

Prevention of lymphatic Filariasis is possible by stopping the spread of infection. Treatment involves a single dose of two medicines give annually to an entire at risk population.^{7, 8} Tablets like Albendazole (400 mg) together with Ivermectin (150-200 mcg/kg), and Diethylcarbamazine Citrate (DEC) (6mg/kg) are used in management of the disease. Large scale treatment conducted annually for 4-6 years, for treating all persons living in areas where the infection is present can interrupt the transmission cycle. The concept in population mind about the side effects of the drugs are generally due to the primary response to the killing of parasites and can easily be resolved and managed.^{8,9}

The present survey program was initiated with an intention to determine and spread the awareness in people on the filarial disease and to assess strategies to bring awareness of filarial disease in various preventive aspects so that can eventually help in elimination of disease from the country. Methodology:

A well designed questionnaire was developed with assistance from clinical pharmacist and Physician. With an intention to eliminate Filariasis by spreading awareness we communicate d people by door to door visit able to received 100 fully filled forms and dispatch same numbers of awareness leaflets on Filaria. A survey was conducted in interior village Kharsad, of Navsari district, Gujarat. The concept is simple just to know and spread about awareness on causative organism of the disease, its contingency, curiosity to know about the disease, receiving the tablets or not and if so than consuming the tablet or not, and whether seen any cases which will help in mapping of the disease and last but important part of our program is will they help in spreading the same awareness to others or not. For each question the respective choices were given to the participants of our study. Percentage analysis for each question was carried out. The respondents were explained and advised to choose the answers that match their perception.

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Results: 55% aware about the lymphatic Filariasis. 15 % people were aware about the cause of spreading and it's contingency. 98% people have received annual medication from nurses as per government annual elimination program out of which 90% people have consume the tablets. On a purpose of studying epidemic of disease 4% people have answered that they have seen the cases of Filaria. 90% people have shown willingness to know about the disease and assured to help in spreading the awareness to others.

Discussion: As per the strategy designed by the WHO to eliminate the lymphatic Filariasis before 2020 the mapping and estimating the burden of the disease are two main key components in preventing the spreading of the disease. To achieve it the survey with patient education involving the community pharmacist or any healthcare provider may be helpful in spreading and preventing spreading of microfilarial infection in various Indian states. This program is a kind of an initiative from students to all other students to come forward and do join the chain and be a part of this elimination. Because we know pharmacist can effectively develop a rapport with people and communicate the information by patient counseling about sign and symptoms of disease; spreading of the disease and by explaining various preventive measures and available treatment for the disease. Still in the awareness point of view many things can be done which might be possible with the support of World Health Organization and other health agencies.

Conclusion: From the result on awareness on Filaria in village was around 55% but still the medication taking behavior is 90%. So, low percentage in awareness within people can be improved by the awareness programs regularly like this to support the government in elimination program.

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