Leptospirosis: A Chain continuous on awareness.

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ABSTRACT:

A program with a purpose to continue the awareness chain based on approach to know about the awareness and spread the basic information to make awareness in people on various fundamental points of Leptospirosis, like causative organism, contingency of the disease, basic treatment options and awareness on free government help for the patients and to know if any of them have seen or observe any cases of Leptospirosis which might be helpful in disease burden estimation in Valsad city, Gujarat. A well designed questionnaire on disease and awareness leaflet in local language under the guidance of clinical pharmacist and doctor prepared and distributed. This study is an initiation to support government in creating awareness as day by day cases are increasing on this disease so by door to door communication and distributing leaflets and education will help in estimating the awareness, interest and willingness to know and involve in such kind of program to spread awareness. To carry out results percentage analysis method is used in this study. Only 18% people were only aware about the disease where 68% were graduates. 15% people were about its causes and contingency and while only 09% were aware about treatment of disease and government help for the patients. The positive point was 100% were interested to know and ready to spread awareness about the disease to others to support the chain to be continued.

KEYWORDS: Leptospirosis, Contingency, leptospira, percentage analysis, Leptospirosis awareness

INTRODUCTION:

Leptospirosis is a disease caused by the bacteria of leptospira type. One of the important causes of acute illness in a country where malaria, typhoid, chicken guinea and dengue are most commonly profound diseases, while the leptospirosis, a contagious disease spread by rodents to people, is endemic in Gujarat state, Tamil Nadu, Kerala and is now being increasingly reported from other parts of India, possibly with better facility to diagnose and identify the contagious disease. Disease of profound importance in view of its serious outcome, leptospirosis in its severe form known as Weil’s disease, and it may have a mortality of as high as 40%.¹ In 1907, Stimson described the micro-organism in renal tubules of a patient who died of so-called as yellow fever. The leptospira was first isolated in Japan by Inada and co-workers in year of 1915; almost 30 years after scientist Weil described the clinical disease in 1886.²

Causative organism: The Pathogenic leptospires belongs to the genus Leptospira is the etiological factor. Genus Leptospira spirochetes is mainly of two species: one is Leptospira interrogan comprising all pathogenic strains, and other is Leptospira biflexa, which contains the saprophytic a non-pathogenic strain isolated from the environment.³ Identification and classification of species of Leptospira is important because of different host specialties.
Mode of transmission: The bacteria which causes leptospirosis are extend through the urine of infected animals, which can transfer to water or soil and can survive there for weeks to months. Various kinds of wild and domestic animals bring the bacterium leptosira. The bacteria can be very dangerous to humans and animals when they come in contact with contaminated water or soil.

Symptoms of the disease: In Leptospirosis the main clinical feature observed in human are chills with muscle aches, jaundice, abdominal pain, diarrhea and rashes on the skin. Leptospirosis can be a very severe and life-threatening disease, especially in cases where the person is already weak or immunocompromised.

Prevention: The risk of acquiring Leptospirosis can be greatly reduced by not swimming or wading in water that might be contaminated with urine of animal, or any other potentially infected animals. Other than this protective clothing or footwear should be worn by those who are regularly exposed to contaminated water or soil like the farmer or worker in farm. In cases when person at high risk than drug Doxycycline belongs to broad spectrum Tetracycline class as a prophylaxis has been given.

Diagnosis: Kidney function tests: blood urea nitrogen and creatinine as well as blood tests for liver functions are performed. Diagnosis is confirmed with tests such as Enzyme linked immunoassay and polymerase chain reaction. The microscopic agglutination test is considered the gold standard in diagnosing Leptospirosis.

METHODOLOGY:
A well designed questionnaire for the survey and awareness leaflet about disease including basic information in local language was prepared with the help of clinical pharmacist and doctor questionnaire was designed. The main intention of the study is although media is a good source of communication but by personnel communicating general population to assess and spread awareness on the disease. In the study we have dispatch 100 awareness leaflets and received 100 fully filled forms on disease awareness study. A percentage analysis was done for the evaluation of the results.

RESULT:
The awareness in population was found to be only 18% where 68% were graduates in the study. There were 72% male and 28% female were involve in the awareness study. 15% were aware about the causes and contingency of the disease. Whereas only 09% were aware about the basic treatment and current available facility for the leptospirosis patients, which is available free of cost. The result for the awareness and interest and willingness to involve in such kind of awareness program is as below.

Figure 1: Result of the study to assess awareness and willingness of participants.

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