

Knowledge Regarding Leptospirosis Among Adults

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ABSTRACT

Leptospirosis has recently reemerged as a major international health problem with an expanded geographic distribution. It affects tens of million people annually and it under control is very acute. In India during 2009 about 15509 cases were reported with 80 deaths. Leptospirosis is increasing day by day and the society is unaware of the fatalities of leptospirosis. The present study is focused to throw some light towards that society. The objectives of the study were to assess the knowledge regarding leptospirosis among adults and to find out the association between the knowledge on leptospirosis and socio-demographic data. The study was undertaken in selected areas of Chackai, to assess the knowledge regarding leptospirosis among adults. The research approach was quantitative and design selected was descriptive design. The setting of the study includes selected areas of Chackai and the population selected was all the adults in the age group of 19-80 years and the sample size is 120. This study concluded that 13.3% of subjects had good knowledge, 72.5% had average knowledge, 14.2% had poor knowledge regarding leptospirosis. Significant association was obtained between knowledge of adults and occupation. The sampling technique is convenient sampling. The data collected was analyzed using frequency table and chi square method. The identified result shows that majority of subject have average knowledge regarding leptospirosis.

Keywords: knowledge regarding leptospirosis, adults

INTRODUCTION

Leptospirosis is an infectious disease caused by pathogenic organism belonging to the genus *Leptospira*, that are transmitted directly or indirectly from animals to humans. Leptospirosis is a major direct zoonosis. Human – to – human transmission occurs only very rarely¹.

Leptospirosis is considered to lie the most widespread of the disease transmissible from animal to man. It has a high prevalence in warm humid tropical countries. Outbreaks mostly occur as a result of heavy rainfall and consistent flooding. Although the global burden of disease is unknown, >500,000 cases of leptospirosis are estimated to occur worldwide each year. The incidence in some areas may be high as 975 cases per lakh population. During the past decade, outbreaks have highlighted the strong links between leptospirosis and extreme weather events in Guyana, India, The Philippines, Thailand.

In the past decade, leptospirosis has emerged as a globally important infections disease. It occurs in the urban environments of industrialized and developing countries, as well as in rural regions worldwide. Morality remains significant, related both to delays in diagnosis due to lack of infrastructure and adequate clinical suspicious and to other poorly understood reasons that may include in inheritance of pathogens of some leptospiral strains or genetically determined host immunopathological response.²

Statement of the problem

A study to assess the knowledge regarding leptospirosis among adults in selected areas of Thiruvananthapuram corporation.

Objectives

- Assess the level of knowledge regarding leptospirosis among adults.
- Determine the association between the level of knowledge regarding leptospirosis and selected socio-demographic variables among adults.

Operational definitions

- Knowledge: The information, understanding and skills that you gain through education or experience. In this study, knowledge refers to awareness and understanding regarding leptospirosis and it includes various aspects like modes of transmission, clinical manifestations, prevention and management.
- Leptospirosis: Leptospirosis is an infectious disease caused by pathogenic organisms belonging to the genus *Leptospira*, that are transmitted directly or indirectly from animals to humans. Leptospirosis is a major direct zoonosis. Human – to – humans transmission occurs only very rarely (WHO, 2022).
- Adults: An adult, is a person older than 19 years of age unless national law delimits (WHO). In this study, adult is a person between the age group of 19-18 years.

Assumption

Adult population may have poor knowledge regarding leptospirosis.

Methodology**Research approach**

Quantitative study approach

Research design

Descriptive design

Setting of study

Setting of study was selected areas of Thiruvananthapuram corporation.

Variables

- Socio-demographic variables: Age, Sex, Religion, Education, Occupation, Income, Marital Status, Type of family, Use of Medias, Nearest available health facility, Source of water supply, Methods of waste disposal, Method of liquid waste management, Previous knowledge about leptospirosis.
- Knowledge regarding leptospirosis

Population

All adult in the age group of 19-80years of selected areas in Thiruvananthapuram corporation.

Sample

The sample of study consist of 120 adults within age group of 19-80 years.

Sample size

The sample size of study is 120.

Sampling technique

Convenient sampling technique

Criteria for sampling selection

- Inclusion Criteria: People who are willing to participate in the study.
- Exclusion Criteria: People who doesn't know Malayalam or English

TOOL AND TECHNIQUE

Tool: Structured interview schedule

Description of the tool

Interview schedules include two sections:

Section 1: Socio demographic data.

Section 2: Knowledge regarding leptospirosis.

Technique

Interview method

Pilot study

After obtaining permission from the concerned authority, pilot study was conducted among 10% of sample. No modifications were made in the tool after pilot study.

Plan for data collection:

After getting permission from the concerned authority and informed consent was obtained from each participant and data was collected by interview method from each participant to assess the knowledge regarding leptospirosis.

Data analysis:

The data was analyzed during descriptive statistics such as its Percentage, mean, median, mode and standard deviation.

Ethical considerations:

- Formal administrative permission was obtained from concerned authorities.
- Informed written consent was obtained from the participant before data collection.

Results

Section 1: Distribution of participants based on Socio-demographic data.

- 31.6% of participants belonged to the age group between 31-40, 26.7% were between the age group of 41-50. 17.5% between age group 20 to 30. 24.2% were belonged to age group above 50.
- Distribution of participants based on gender revealed that 53.3% were female and 46.7% were males.
- Regarding the religion 35% of participants were Christians and 65% of participants were Hindus.
- Distribution of educational status of the participants revealed that 38.3% of participants had PG. 34.2% of participants had degree 16.7% of participants had higher secondary education. 6.6% of participants were professionals and 4.2% of participants were illiterate.
- Regarding the occupational status 6.7% of participants were housewives, 3.3% of participants were manual labours. 38.3% of participants were private employees. 40% of the participants were professionals and 11.7% of participants were unemployed or retired.
- Distribution of income of the participants revealed that 47.5% of the participants have income between Rs. 10001-20000 and 52.5% have above Rs. 20000.
- Regarding the family status of the participants revealed that 73.3% belongs to nuclear family and 26.7% were belongs to extended nuclear family.

- 100% of participants had no past history of leptospirosis.
- Distribution of knowledge on leptospirosis showed that 100% of participants had knowledge on leptospirosis.
- 1.7% had TV ,55% had internet and 43.3% had newspaper as media for information.

Section 2: Distribution of participants regarding knowledge of leptospirosis among adults

While assessing the knowledge regarding leptospirosis 72.5% of participants had average knowledge, 13.3% of participants had good knowledge and 14.2% of participants had poor knowledge.

Section 3: Association between knowledge regarding leptospirosis with socio demographic variables

- There was significant association between knowledge regarding leptospirosis among adults and social democratic variables like age and education.
- Significant association was not observed between knowledge regarding leptospirosis among adults and socio demographic variables like sex, occupation, past history, previous knowledge and medias.

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