AWARENESS ON COMMUNICABLE DISEASES AMONG PROSPECTIVE TEACHERS

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MASTER OF EDUCATION

By

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DECLARATION

I, **C.BINDHU** do hereby declare that this dissertation entitle **"AWARENESS ON COMMUNICABLE DISEASES AMONG PROSPECTIVE TEACHERS"** submitted for the degree of Master of Education has done by me and it is an original work. I also declare that this dissertation has not been submitted fully or partially for award of any other degree, diploma and fellowship for any other Universities or Institution.

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CERIFICATE

This is to certify that the dissertation entitled **"AWARENESS ON COMMUNICABLE DISEASES AMONG PROSPECTIVE TEACHERS"** submitted to Tamil Nadu Teacher's Education University, Chennai, for the award of degree of Master of Education is a record of research work carried by **C.BINDHU** (Reg.No:M1411421) under my guidance and supervision. It is further certified that the work is an original one and free from any kind of duplication.

Place: Attoor

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1.1 INTRODUCTION

The development of the individual and the progress of the nation depend mainly upon the educational system of the country. Education is an attempt on the part of the adult member of human society to share the development of the coming generation accordance with its own ideals of life. The time has come for each of us to assume a sense of personal responsibility for our own health.

The first aim of the health education suggested by world health organization was to ensure that health is accepted by the community as a valued asset. The report of Cohen committee on health education in 1964 recognized the importance of health education in public health service and its recommendations led to the strengthening of the central provision for coordination research and experiment. The health education of school child is to prepare him for this adult world in which sickness is prevalent, and get much of it preventable, must concentrate on cultivating the right attitudes to health that is the need to preserve the body as an active efficient and to know how to care and use of which maintains it in this happy state.

For good health it is very essential that we should prevent diseases. Many of the diseases in human beings are caused by minute living organisms called pathogens which enter the body from another person who is suffering from diseases. Many of the organisms like bacteria, viruses, protozoa, worms etc, are the pathogens that cause different diseases in human being. The diseases caused

by these organisms which are transferred from one person to another called communicable diseases. They are transmitted form one person to another through different channels like air, water, food materials, insects etc. Any disease that is communicable or contagious is infectious. Common cold, tuberculosis, dysentery, cholera, malaria etc, are some of the communicable diseases.

Infection represents the most intimate way in which a microorganism causes disease. In order to cause a infectious disease, a pathogen should accomplish the following:

- Pathogen must enter the host.
- It must resist host defences.
- It must multiply on or in the host tissue.
- It must damage the host.

If the infection does not produce detectable clinical symptoms, they are called subclinical infections.

Pathogenicity is the capability of a microbe to cause disease. First the parasite should gain entry in to the host's tissue. Then it causes anatomical and physiological changes which result in the change of health. This condition is referred to as disease. Pathogen refers to an organism capable of causing disease. Pathogenicity has several grades. Some are less pathogenic, common cold viruses; where as some are highly pathogenic, eg. Vibrio cholerae. It causes cholera, which is fatal. Some microorganisms may be opportunistic. They live as non-

pathogens in a healthy individual with normal defence mechanism but they begin to invade patients suffering from AIDS.

AIDS (Acquired Immunodeficiency Syndrome) is caused by a virus known as Human Immunodeficiency Virus (HIV). This is mainly a sexually transmitted disease. The ministry of health estimate that currently there are at least fifteen lakh HIV infected person in India. People should be made aware of these diseases, their cause how it affects. Various awareness programs should be conducted for the welfare of the society.

1.2 NEED AND SIGNIFICANCE OF THE STUDY

Every day from birth to death each of us is exposed to potentially harmful even lethal organisms. These organisms cause several communicable diseases. Communicable diseases are of highly public concern, prevention of any diseases is preferable to treating it after it actually appears. The harmful effects of every communicable disease can be prevented or at least minimized by healthful behaviour. Health related behaviour was intensively studied by Lesta Breslow (1975) more than 7000 adults were studied for a period of over five years. It was found that basic health habits are closely related with a long life.

The national conference on medical and health education held in New Delhi (1979) recommended that medical research in the country should focus on communicable diseases, effective birth control method, environmental health

problems, promising remedies in indigenous systems and on medical education itself.

It is very importance that the public should be very much aware about communicable diseases. It has been a major cause of death on most of the countries of the world. In order to have a healthy society it is very necessary that young adults should be aware of communicable diseases, prevention of communicable diseases involves the responsible behavior of a motivated individual. The National Institute of Cholera and Enteric Diseases (NICED) (1991) found 80 percent of 273 intravenous drug users in a town in Manipur to be infected with HIV and estimated 20,000 drug users in Manipur to be infected.

It is important to create awareness about communicable diseases among prospective teachers. The individual properly motivated will be successful in life. So awareness on communicable diseases has a prominent place in developing healthy nation. Considering these facts the investigator decided to conduct a study on awareness on communicable diseases among prospective teachers.

1.3 STATEMENT OF THE PROBLEM

The research problem is entitled as **"Awareness on Communicable diseases among Prospective Teachers".**

1.4 OPERATIONAL DEFINITIONS OF TERM

Awareness

Awareness is the state of being aware consciousness of a situation or object without direct attention to it or definite knowledge of its nature. (Good, 1973)

The capacity of the organism to achieve a conscious appreciation of the relationship of all body segments to movement, and the ability to label body parts and to appreciate the functional properties of various body parts. (Good, 1973)

Communicable diseases

A disease that may be transferred from one person to another without actual contact. (Good, 1973).

Prospective teachers

In this study prospective teachers means students studying in the B.Ed degree course.

1.5 OBJECTIVES OF THE STUDY

1. To construct and validate a tool for measuring awareness of communicable diseases among prospective teachers.
2. To compare the mean scores of awareness on communicable diseases among prospective teachers based on the background variables such as
    a) Gender

b) Locale

c) Marital status

d) Religion

e) Community

f) Types of management

g) Educational qualification.

1.6 HYPOTHESES FRAMED

1. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on gender.
2. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on locale.
3. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on marital status.
4. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on religion.
5. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on community.
6. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on type of management.

7. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on educational qualification.

1.7 METHODOLOGY IN BRIEF

a) Sample

The sample consist of 400 prospective teachers studying in various colleges in kanyakumari district.

b) Method

The method adopted for the present study will be normative survey method.

c) Tools used

The following tools are used for the present study

i) Communicable Diseases Awareness Test (constructed and validated by C. Bindhu and Mr.V.S. Pavithra Kumar).

ii) General Data sheet.

d) Statistical techniques used

The following are the major statistical techniques used for the study

- Arithmetic mean
- Standard deviation

- t-test
- ANOVA

1.8 DELIMITATIONS OF THE STUDY

The present study limited in terms of the following

i. The present study is confined to Kanyakumari District.

ii. The sample size is limited to 400 prospective teachers.

1.9 ORGANIZATION OF THE REPORT

Chapter-I

Deals with introduction, need and significance of the study, statement of the problem, operational definition of the terms, objectives of the study, hypotheses framed, methodology in brief, delimitations of the study and organization of the report.

Chapter-II

Deals with review of related literature that contains two sections. Section A contains theoretical overview of the study and section B contains review of related literature containing Indian and Foreign studies and critical review.

Chapter-III

Explains the methodology of the present study. This chapter consists of the method adopted for the present study, tools used for the study, sample selected for the study, scoring and tabulation, and statistical techniques used.

Chapter-IV

Includes the details regarding the analysis of data and also interpretations.

Chapter-V

Deals with the study in retrospect, findings, conclusion, implications of the study and suggestions for further research.

CHAPTER II

REVIEW OF RELATED LITERATURE

- **Theoretical Overview**
- **Studies conducted in India**
- **Studies conducted Abroad**

2.1 INTRODUCTION

The study of the related literature is an essential aspect of research work. The knowledge of the related literature brings the researcher up-to-date on the work which others have done and thus to state the objectives clearly and concisely. It can avoid unfruitful and useless problem area. It helps to select those areas in which positive findings are very likely to result and his endeavors would be likely to add to the knowledge in a meaningful way.

The review of related literature gives the researcher an understanding of the research methodology. The review of related literature is the foundation on which the structure of further studies is laid and is a fruitful source of hypothesis. It enables the investigator to have the clear perception of the problem in hand and also helps to demonstrate the relationship between completed research and the topic under investigation.

The final and important specific reason for reviewing the related literature is to know about the recommendation of previous research listed in their studies for further research. According to Mouly, "The review of related literature promotes a greater understanding at the problem in its critical aspect and ensures the avoidance of unnecessary duplication". According to Lokash Koul (1990), "A careful review of the journals, books, dissertations, thesis and other sources of

information on the problem to be investigated is one of the important steps in the planning of any research study".

Review of related literature provides the researcher an understanding and insight into the previous work that has been already done in the area. It also suggests methods of research appropriate to the problem and locate comparative data useful in the interpretation of results. One of the early steps in planning research work is to review the research. It is very essential for every investigator to be up-to-date in the information provided. It indicates the clear picture of the problem to be solved.

2.2 IMPORTANCE OF THE REVIEW OF RELATED LITERATURE

The review of related literature serves the following purpose

- It enables the researcher to define the limits of his field. It helps to delimit and define his problems.
- Review of literature gives the scholar an understanding of previous work that has been done.
- It gives an understanding of the research methodology which refers to the study is to be conducted.
- It provides the means of getting to the frontiers in the field of his research unless he has learnt what others have done and what still remains to be

done.

- It furnishes him with indispensable suggestion about good procedures, likely methods and fried techniques.
- It prevents pointless repetition of research.

2.3 NEED FOR REVIEW

One of the early steps in planning a research work is to review the research. It is very essential for every investigator to be up to date in the information provided. Review of literature is considered as the most important pre-requisite to actual planning and conducting the study. The review of literature indicates the clear picture of the problem to be solved.

2.4 PURPOSE OF THE REVIEW

- The review of related literature enables the researcher to define the limits of his field.
- By reviewing the related literature the researcher can avoid unfruitful and useless problem areas.
- Through the review of related literature, the researcher can avoid unintentional duplication of well-established findings.
- The review of related literature gives the researcher an understanding of the research methodology.

- ❖ It helps to know about the recommendations of previous researchers listed in their studies for further research.

This chapter is divided in two sections.

- Section A: Theoretical overview
- Section B: Review of related studies

2.5 SECTION A: THEORETICAL OVERVIEW

2.6 COMMUNICABLE DISEASES

Communicable disease means a disease that may be transferred from one person to another without actual contact (Good, 1973).

2.6.1 CHARACTERISTICS OF COMMUNICABLE DISEASES

1. They are very common.
2. Some of them cause death and disability.
3. Some of them cause epidemics.
4. Most of them are preventable through fairly simple interventions.
5. Many of the affect infants and children.

2.6.2 TYPES OF COMMUNICABLE DISEASES

1. Air Borne Communicable Diseases

The disease that may be transferred through air is called air borne communicable diseases. A large number of bacterial diseases of man is air borne diseases causes the respiratory tract .The infections spread through salivary droplets in cough, sneezing, conversation and indirectly by formatives. Mostly they do not survive, for a long period outside the host. Respiratory diseases are controlled by minimizing contacts and increasing resistance of individuals to the infection by immunization. Some of the pathogenic bacteria that gets transmitted in these way are,

a. Tuberculosis

Tuberculosis is a disease of the lungs and respiratory tracts. It is commonly called TB. The infection is due to inhalation of the bacterium or due to lowered body resistance caused by malnutrition. The infection is common in children. In the lungs, the bacterium gets surrounded by defensive cells and becomes sealed to form a calcified nodule called tubercle. The tubercle consists of bacilli, several layers of macrophages and an outer layer of lymphocytes. The infected children develop a life long immunity to this disease.

b. Meningitis

Meningitis may be caused by viruses, fungi protozoans or bacteria and different forms of the diseases. Symptoms of menningitis are neck stiffness, fever, headache and vomiting. Hib vaccine and Pneumococcal vaccine are used to

control these diseases.

c. Diphtheria

Diphtheria is an acute communicable disease which attacks mainly the nose, throat and tonsils. It is caused by corynebacterium diphtheriae. It is a bacillus (rod). Diphtheria is charcterised by a local membrane formation at the site of implantation. Diphtheria is primarily a disease of children. It has an incubation period 2-5 days. The infection may enter a host by respiratory route or through wounds, eye and genitalia.

d. Streptococcal Infection

Streptococci are spherical bacteria arranged in twisted chains. The streptococcus pyogenes causes skin infections. Infection occurs on wounds, injuries and abrasions. It causes two types of skin infections, namely erysipelas and impetigo. Erysipelas is caused by streptococcus pyogenes. Impetigo is caused by streptococcus biogenes.

e. Whooping cough

Whooping cough is an acute, highly communicable infection of respiratory tract caused by bordetella pertusis. It is characterized by catarhal symptoms of respiratory tract followed by severe attacks of coughing frequently ending in whoop. Due to blockage of bronchi with mucus and debris, difficulty in breathing occurs leading to hypoxia. It is entirely a human disease. It takes place

by droplet infection and by direct contact.

f. Leprosy

Leprosy is a chronic contact bacillary infection of man caused by Mycobacterium leprae. This bacillus is a slightly curved rod. It also affects skin, mucus membranes, muscles, eye, kidneys, liver and adrenal glands.

- Leprosy is characterized by a hypopigmented patches.
- Partial or total loss of sensation in the affected areas.
- Presence of thickened nerves.
- Presence of acid fast bacilli in skin smears.

The incubation period is about 2-5 years. The bacilli, Mycobacterium leprae multiply unchecked in the skin and in some other parts.

g. Influenza

An acute viral infection of the respiratory tract with inflammation of nasal mucosa, pharynx and conjuctiva. Influenza is caused by Myxovirus group. Influenza is spread by droplet infection or droplet nuclei from person to person. Influenza is characterized by fever, chills, headache, body pains, muscular pains, coughing, sore throat, nasal discharge.

2. Food and Water Borne Communicable Diseases

The diseases that may be transferred through food and water is called

food and water borne communicable diseases. Food and water borne infections are also called enteric infections. Transmission may be quite indirect due to contamination of food and water. Contact with carriers, housefly, direct transfer, contact with the excreta of infected persons are different routes for the diseases.

a. Cholera

Cholera is an acute specific highly communicable disease caused by vibrio cholerae. It is a gram negative comma shaped actively motile bacteria with a polar flagellum. Cholera is characterised by acute severe diarrhoea with rice water stools, vomiting, rapid dehydration, muscular cramps and anuria. Cholera occurs only in man. Vibrio enters orally through contaminated food or drink.

b. Food poisoning

A common food intoxication is due to staphylococcus aureus. It is a gram positive coccus. They may come from food handlers who have acute infections or from healthy carriers who harbour them in the nose or throat.

c. Shigellosis

The genes shigella is essentially restricted to human as a natural host. It is a typical member of the Enterobacteriaceae and is closely related to the genes Eschericia. It is a gram negative bacillus distinguishable from Enterobacteria.

d. Salmonellosis

Salmonellosis is a disease caused by bacterial food infection. It is a food poisoning caused by the bacterium, salmonella. Salmonella is a gram negative rod shaped bacterium. It grows well in the food. Infection occurs through contaminated food or domestic animals. The salmonella reaches the intestine through the ingested food. The bacterium multiplies in the intestine and causes the disease.

e. Botulism

Botulism is a neuroparalytic disease. It is due to an exotoxin produced by the bacterium clostridium botulinum in improperly canned or preserved foods. It is due to food poisoning. Clostridium botulinum lives in the soil. It grows only in anaerobic condition. It grows in canned, smoked or cured food. It does not grow in fresh food. It is a rod shaped bacterium. The food is easily contaminated by the spores of clostridium.

3. Sexually Transmitted Diseases

Human direct contact diseases by sexual means are called veneral diseases or sexually transmitted diseases (STD). If these diseases are not treated they can lead to serious local or generalized complications. Control and eventual eradication of them will depend on early detection of patients by training of contact sources, prompt and adequate treatments etc. A few important sexually transmitted diseases caused by bacteria are as follows.

a. Gonorrhoea

Gonorrhoea is a venereal disease. It affects the mucous membrane of urinogenital tracy, eyes, throat and rectum. It is an infection of the reproductive system. It is a bacterial disease. Gonorrhoea is a sexually transmitted disease. When the new born passes through the infected birth canal of the mother, the eye is infected and the eye disease is called ophthalmia conjunctivitis.

b. AIDS

AIDS is called acquired immuno deficiency syndrome. It is a viral disease. It is a contagious disease. But it is not transmitted through contact. As it is received from an infected person, it is said to be acquired. AIDS is caused by the infection of an RNA virus on lymphocytes. As a result, the activity of T-helper cells is depressed. This leads to the suppression of the immune system. Hence the name immuno deficiency.

c. Syphilis

The causative agent for syphilis is Treponema pallidum. Syphilis is a dreaded sexually transmitted disease. This disease occurs only in human beings and it is transmitted by direct sexual contact. Infected mother may infect the foetus at the early pregnancy and produce congenital syphilis in the child.

There are three stages in the progression of syphilis. They are,

- Primary stage
- Secondary stage
- Tertiary stage

In the primary and secondary stages the patient is able to transmit the infection to others.

2.7 SECTION B: REVIEW OF RELATED STUDIES

2.7.1 STUDIES CONDUCTED IN INDIA

Bhella. S et al (2005) conducted a study on "Knowledge about HIV/AIDS among senior secondary school students in Jamnagar Gujarat". The major objectives of the study was to extent the knowledge beliefs and attitudes of adolescent students towards HIV/AIDS in two senior secondary school of Jamnagar, Gujarat". The major findings of the study revealed that a higher proportion of biology students were aware of the fact that AIDS cannot be transmitted through causal contacts like kissing, hugging, shaking hands and sharing utensils but many of them from both the streams had some misconceptions about the disease.

Singh U.S. and Choudharge S.K. (2005) conducted a study on "Knowledge, attitude, begaviour and practice study on Dog-bites and its

management on the context of prevention of Rabies in a rural community of Gujarat". The major objective of the study was to know the general awareness pertaining to rabies in rural community, the knowledge of people about dog-bites. The major findings of the study revealed that all of the individuals knew about rabies and 98.6% individuals knew about its transmission by dog-bites. Only 2% of literature farmers and 1% of graduate service man were not sure about its real transmission.

Garima Sing (2008) conducted a study on “Effects of yogic practices in hypothyroid disease”. The major objectives of the study was to unbalanced secretion of thyroxine hormones which secretes from thyroid gland. The tool used for the study was thyroid function test by radio immune assay (RIA). The sample used for the study was 60 subjects will be selected in quota sampling technique. The major findings of the study revealed that insufficient iodine for synthesis of T3 and T4, in sporadic cases there is congenital absence of the thyroid gland. In both situations referred physical growth and mental development became evident within a few weeks or months of birth.

Chaturvedi. K and Himanshu et al (2009) conducted a study on “Epidemic disease of malaria in North east India”. The major objective of the study was to findout the effect of malarial disease in urban and rural people living in north-east, India. The major finding of the study revealed that people living in

urban area has an awareness about malarial diseases and its effect rather than rural people's in north-east, India.

Jyoti Deepak Mahatre (2010) conducted a study on "Development of microbicides for sexually transmitted diseases". The major objectives of the study was to synthesis of ester of L-Arginine with new catalysts, synthesis of new Amides, from Arginine esters, to check antimicrobial activity of new Amides, cytotoxic studies of the compounds having good antimicrobial activity. The method adopted for the study was Broth dilution method and HPLC method. The major findings of the study revealed that higher risk of HIV infection with N-9 as a potential microbicide candidate highlights the importance of the toxicity profile of any potential agent.

Kansal Sangeeta et al (2011) conducted a study on "Awareness regarding tuberculosis in an urban setting of Varanasi, Uttar Pradesh". The major objectives of the study was to identify the influences of tuberculosis disease in urban people living in Varanasi. The major findings of the study revealed that most of the people in urban area were not aware about the correct cause of tuberculosis disease.

Khan N.A. et al (2011) conducted a study on "Assessment of college students awareness about tuberculosis in Moradabad". The major objectives of the study was to awareness about tuberculosis among college students. The major findings of the study revealed that among 360 students of undergraduate both male

and female posses have tuberculosis awareness.

Shaji kuriakose (2012) conducted a study on “Lifestyle diseases in Kerala : An analysis of socio-economic status, consumption pattern and adolescent obesity in Kottayam district. The major objectives of the study was to findout the different types of lifestyles diseases prevalent in Kerala, various factors contributing to lifestyle diseases and obeysity, examine the lifestyle of adolescents in the study area. The sample used for the study was random sampling technique. The major findings of the study revealed that physical exercise habits have decreased among adolescents. The percentage of adolescents doing regular exercise is only 33.3. Majority of the adolescents (59.9%) do not play outdoor game regularly.

Khopkar Priyanka (2012) conducted a study on "Genetic and neutralization properties of the envelope gene in HIV-1 and HIV-2 monotypic and dual infection" The major objectives of the study was to characterize envelope gene of viruses isolated from HIV-1 and HIV-2 monotypic and dually infected patients in order to study the genetic diversity, autologous, heterologous and cross neutral lization patterns in HIV-1 and HIV-2 monotypic and dually infected serum samples. The sample used for the study was 40ml of whole blood will be collected from (min 5 and max 10) HIV-1, HIV-2 and HIV-1 and 2 (dual infected) patients at three different time points (6 and 12 months) after obtaining an informed consent. The major findings of the study revealed that molecular data generated

from the study would provide important highlights of the genetic characteristics of the envelope gene in HIV-1 and 2 monotypic and dual infection.

2.7.2 STUDIES CONDUCTED ABROAD

Jabari A.et al (2006) conducted a study on “Knowledge of tuberculosis among medical professionals and university students in Oman”. The major objectives of the study was to analyse the knowledge of tuberculosis among medical professionals and university students in Oman. The major findings of the study revealed that tuberculosis knowledge was significantly higher among medical professionals but there was no significant difference between men and women.

Cain Kevin, P.et al (2007) conducted a study on “Tuberculosis among foreign born persons in the United states”. The major objectives of the study was to findout the effect and knowledge of tuberculosis in foreign born people living in the United states. The major findings of the study revealed that most of the foreign born peoples in United States are affected with tuberculosis due to the lack of awareness.

Rvan Mactaren Wallace et al (2009) conducted a study on “Increasing proportion of advanced pulmonary causes of tuberculosis in United States”. The major objectives of the study was to examine the TB effect of people in United States. The major findings of the study revealed that United state peoples are

affected with pulmonary tuberculosis in every year.

Kudom Andreas, A and Henash Ben, A (2010) conducted a study on "The potential role of the educational system in addressing the effects of inadequate knowledge of mosquitoes on use of insecticide treated nets in Ghana". The major objectives of the study was to analyse the understanding of perceptions of malarial disease knowledge on mosquitoes and the value attached to ITN among secondary and tertiary students in cap coast. The major findings of the study revealed that more than 90% of students had high knowledge of malarial transmission and ITN but little knowledge of mosquito life history.

Sagbakhen Mette et al (2010) conducted a study on "The diagnosis of tuberculosis diseases". The major objectives of the study was to findout the people who are aware about early diagnosis of tuberculosis diseases. The major findings of the study revealed that 98% of people will diagnosis the tuberculosis disease after infection.

Wrong, Emmy M. et al(2010) conducted a study on "Teacher's risk perception and needs in addressing infectious disease outbreak". The major objectives of the study was to findout the out breaks of the influenza A (HINI) virus has led to numerous precautionary school closures in several countries. The major findings of the study revealed that no research is available on the school teacher's perception as a health protective resource in controlling communicable disease outbreaks.

Das Aahis, and Sundari Ravindran(2011) conducted a study on " Malaria disease in Orissa" . The major objectives of the study was to asses the knowledge of people in Orissa about malarial disease. The major findings of the study revealed that 90% of respondents recognized fever as a common symptom of malaria 72.3% said mosquito bites cause malaria. 70.3% of respondents reported mosquito control and personal protection to be the method of malaria prevention and 24.6% identified chloroquinine as the drug used for treatment.

Sarkar. J et al (2011) conducted a study on modeling for appropriate awareness of influence among urban population of Vadodara". The major objectives of the study was to findout the awareness level of people about influenza living in vadodara The major findings of the study revealed that there exist low level of awareness regarding influenza virus.

Norman et al (2011) conducted a study on "Evaluating the science of Discovery in complex health Systems". The major objectives of the study was to analyse the complex health problems such as chronic disease or pandemics require knowledge that transcends disciplinary boundaries to generate solutions, such transcends disciplinary discovery requires researches to work and collaborate across boundaries, combining elements of basic and applied science. The major findings of the study revealed that more interdisciplinary health science acknowledge that there are few metrics to evaluate the products associated with these new ways of working.

Janahi Essam et al (2011) conducted a study on "Public knowledge, risk perception attitudes and practices in relation to the swine flu pandemic". The major objectives of the study was to findout the knowledge and risk of swine flu in people living in Gulf countries. The major findings of the study shows that 51% of people living in Gulf countries have the awareness about swine flu disease where are remaining people has no knowledge about swine flu disease.

Woodward, Alicia et al (2011) conducted a study on "Evaluating the effectiveness of contact tracing on Tuberculosis outcomes in Saskatchewan using Individual-Based Modeling". The major objectives of the study was to fidout celiac disease a genetic autoimmune disorder characterized by a heightened sensitivity to gluten, the protein in wheat, barley and rye. The major findings of the study revealed that disease is more common than most people think, affecting approximately 3 million in the United states, one in hundred.

Fuller Colin et al (2015) conducted a study on "FIFA II for health programme implementation in five countries in sub-saharan Africa". The major objectives of the study were to assess the effectiveness of the FIFA II for Health programme in increasing children & apos;s knowledge about communicable and non-communicable diseases in five countries of sub-saharan Africa. The method adopted for the study was a prospective five-cohort study was implemented in schools in Ghana (17) Malawi (12) Mamibia (11), Tanzania (18) and Zambia(11). The major findings of the study revealed that mean attendance by children during

the programme ranged from 88% (Malawi) to 99% (Tanzania) of participants.

CRITICAL REVIEW

Review of related literature help link the previous researches with present research. A review of related literature in the area of awareness on communicable diseases among Prospective teachers presented in the chapter has helped to give adequate insight into the awareness under study.

The researcher reviewed 21 studies totally, 9 Indian studies and 12 studies conducted abroad. The population taken in these studies was medical field students and college students. In most of the studies the investigator used normative survey method. In most of the studies the investigator used for the sampling as quota sampling, stratified sampling and random sampling method. The review of related study helps the investigator to frame the objectives and hypotheses, selection of sample, tool and statistical techniques for the present study.

CHAPTER III

RESEARCH METHODOLOGY

- **Methods of Research**
- **Method adopted for the Present Study**
- **Tool Development**
- **Tools used for the Present Study**
- **Reliability and Validity Scale**
- **Statistical Techniques use**

3.1 INTRODUCTION

Research methodology is a way to solve the research problem systematically. Methodology occupies a very important place in any type of research as the validity and reliability of the findings depends upon the method adopted.

Research is an academic activity and as such the term should be used in a technical sense. According to Clifford Woody, “Research comprises defining and redefining problems, formulating hypotheses or suggested solutions, collecting, organizing and evaluating data, making deductions and reaching conclusions and at last carefully testing the conclusion to determine whether they fit the formulating hypotheses”. D. Slazenger and Stephenson in the Encyclopedia of social sciences define research as, “The manipulation of things, concepts or symbols for the purpose of generalizing to extend, correct verify knowledge, whether that knowledge aids in construction of theory or in the practice of an art”.

Research is, thus an original contribution to the existing stoke of knowledge making for its advancement. It is the pursuit of truth with the help of study, observation, comparison and experiments. In short, the search for knowledge through objective and systematic method of finding solution to a problem is research (Kothari, 2004).

3.2METHODS OF RESEARCH

Research methods refers to the various steps of plan to be adopted in solving a research problems are formulated, the definition of terms, the choice of subjects for investigation, the validation of data gathering tools the collection analysis and interpretation of data, and the process of inferences and generalization. George Mouly has classified research methods into three basic types.

i) Historical method
ii) Normative survey method
iii) Experimental method

i) Historical method

"Historical research is the application of scientific method of inquiry to historical problems". It demands standards of careful methodology and spirit comparable to those which characterize other types of research. Historical research is one of the most difficult types of investigation to conduct adequately.

ii) Normative Survey method

The descriptive or normative survey method of educational research is very common. It is the method of investigation which attempts to describe and

interpret what exists at present in the form of conditions, practices, process, trends, attitudes, beliefs etc. It is concerned with the phenomena that are typical of the normal conditions. The word survey indicates the gathering of the data regarding current conditions. The word normative is used for the purpose of ascertaining which is the normal or typical condition or practice.

iii) Experimental method

"Experimentation is the name given to the type of educational research in which the investigator controls the educative factors to which a child or group of children is subjected during the period of inquiry and observe the resulting achievement".

"Experimental research is the description and analysis of what will be or what will occur, under controlled conditions".

3.3 METHOD ADOPTED FOR THE PRESENT STUDY

The present study attempt to find out the awareness on communicable diseases among prospective teachers. Since the problem is concerned with "Survey" type, the investigator has selected the normative survey method for conducting the study.

3.3.1 Normative survey method

The word ‘Survey’ indicates the data regarding current conditions. The word ‘normative’ is used because survey is frequently node for the purpose of ascertaining which is the normal or typical condition or practice.

Survey studies are conducted to collect detailed descriptions of existing phenomena with the intent of employing data to justify current conditions and practices or to make more intelligent plans for improving them. “Normative survey” is applied in order to suggest the two closely related aspects to study. The descriptive or normative survey method of educational research is very common. It is that method of investigation which attempt to describe and interpret what exists at present in the form of conditions, practices, processes, attitudes, beliefs etc.

It is concerned with the phenomena that are typical of the normal conditions. It is an organized attempt to analyze, interpret, and report the present studies of social institution.

3.3.2 Characteristic of Normative Survey Method

The following are the characteristic of normative survey method.

1. It deals with the present.

2. It is essentially cross-sectional.
3. It involves fact finding approach.
4. It gathers data from a relatively large number of cases.
5. It is not concerned with the characteristics of individuals.
6. It involves clearly defined objectives.
7. It requires careful analysis and interpretation of the data gathered.
8. It requires logical and skillful reporting of the finding.
9. It provides information useful to the solution of the local problems.
10. It determines the present trends and solves current problem.
11. Surveys may be qualitative or quantitative.

3.3.3 Stages in a survey

The following steps are involved a survey method.

a. Choosing the topic to be studied
b. Reviewing the literature
c. Framing the hypotheses
d. Carrying out preparatory investigations and interviews
e. Drafting the questionnaire or interview schedule
f. Conducting a survey
g. Finalizing the questionnaire
h. Selecting a sample of the population
i. Collecting the data

j. Processing the data and analyzing the results

k. Writing the research reports, perhaps in the form of a book

l. Publication of the report

3.3.4 Significance of survey

a) It determines the present trends and solves current practical problems.

b) It secures historical prospective through a series of cross-sectional pictures of similar conditions at different times.

c) It suggests the course of future development

d) It provides background for future studies

3.4 TOOL DEVELOPMENT

The most important step in any research work is the collection of relevant data. For this appropriate tool is essential. The tool for the present study prepared by the investigator is for measuring, communicable diseases awareness. The related tests on this area helped the investigator to develop the tool.

The tool which is developed for the present investigation is named as awareness on communicable diseases among prospective teachers. The steps followed in the development of the tool are presented below under various heads.

1. Planning of the test
2. Item writing
3. Item editing

4. Arrangement of the items
5. Preliminary try out (Try out 1)
6. Draft scale
7. Final try out (Try out 2)
8. Scoring
9. Item analysis
10. Item selection
11. Final scale
12. Establishing Reliability and Validity
13. Final format of the test

1. Planning of the test

The communicable diseases awareness test prepared by C. Bindhu and Mr. V. S. Pavithra Kumar (2015) aims at measuring the communicable diseases awareness of Prospective Teacher in Kanyakumari district.

2. Item writing

One of the most important steps in the tool construction is the writing of the suitable item. After the careful of the collected materials regarding the communicable diseases the investigator prepared the questions.

In this test four options are given for making the response. The subjects are expected to select only one according to their interest.

3. Item editing

Item editing is the process of checking and scrutinizing the items. After collecting maximum number of questions related to communicable diseases awareness, the investigator made a through study of questions. Critical examination and careful revision of items are done here. Items which are overlapped in meaning were eliminated. The items were written in simple language so that the prospective teachers can understand easily. The items prepared by the investigator are given to the experts for verification based on their suggestion. The total numbers of items were reduced to 69.

4. Arrangement of items

All the items were grouped, ordered and located in random manner inorder to arouse interest and to maintain attention for responding.

5. Preliminary Try out

A preliminary try out the test was arranged to findout the weakness and work ability of the items. The difficulties in responding the items and a rough estimate were noted. The step helped the investigator to modify certain items which were vague and questionable. For this purpose the scale was given to 100 prospective teachers.

6. Draft scale

The first draft was prepared by the investigator and printed with the provision to mark responses with the questionnaire. It was printed in English. It also included the necessary directions for the respondents. A sample copy of draft scale is given as appendix C.

7. Final try out

The present investigator selected 9 colleges in Kanyakumari District. Then total of 400 prospective teachers was selected as the sample. The researcher met the prospective teachers in their classroom and gave the following instructions. Certain statements related to your studies are given below each question has four options. Please read each of the statements carefully and answer them by putting a tick (✓) mark against the answer which your think appropriate for yourself. Please respond to all questions. After giving response to all questions the investigator collects the 400 response sheets.

8. Scoring

The collected data were scored systematically using a scoring key prepared by the investigator. The tool consists of 69 objective items. Each item consists of four answers. From that answers only one is correct. For getting the scores, each answered item was checked by using the scoring key.

9. Item analysis

Item analysis is an important step in a test construction. Item can be analyzed qualitatively in terms of their content and quantitatively it terms of their statistical properties. Qualitatively analysis includes the consideration of content validity and evaluation of items in their terms of effective item writing procedures.

Quantitative analysis on the other hand includes principle, the measurement of item difficulty and item discrimination. Both the validity and reliability of any test depends ultimately on the characteristics of the items.

Item analysis make it possible to shorten a test and at the same item to increase its validity and reliability. Other things being equal, a longer test is more valid and reliable than a shorten one.

The method of item analysis used in the case of present investigation is the one developed by Mathews (1982) called Mathew analysis table. This table gives item criterion correlation phi co-efficient and percentages of testers marking the keyed answer (p value). One of the advantages of phi co-efficient is that any convenient tail proportion can be made use of in order to use the same table.

The response sheets were arranged in the order of the criterion score. The criterion score is the total score of the trial form of the test itself. Hundred response sheets having the highest criterion score were taken constituting the upper tail. Similarly hundred response sheets having the lowest score were taken,

forming the lower tail. The final percentage need for reacting the item indices from the table are the following.

PL is the percentage of individuals in the lower tail marking the keyed answer.

PU is the percentage of individuals in the upper tail marking the keyed answer.

In the “Mathew item analysis table” all indices for the same value of PL have been grouped together in order to read the indices of an item, the PL value of the given item was located first, then in that section the PU value of the item along with left margin was located and the corresponding phi and P value were read whenever the PL and PU values were interchanged while reading the indices and then a negative sign was attached to the ‘phi’ co-efficient. When PL and PU are equal ‘phi’ is zero.

10. Item Selection

From the items highest correlation values (phi values) the required number of items was selected. The special features about the ‘phi’ values tend to be high for items having medium ‘P’ values item selection based on ‘phi’ values alone would give the desired results. Items with ‘Phi’ values below the five percentage (5%) level of significance are not considered usually.

When ‘Phi’ values of most items were high and the number of items large, items with same spread of ‘P’ values would be desirable. It may be mentioned

here that ‘Phi’ values were computed for every combination of PL and PU values of Gai Hord’s (1954) formula.

From the draft scale, the items having the phi value 0.14 and above are selected are given in the following

Table 3.1

Detail of items selected in the Communicable Awareness Test

Q. No	P_L	P_U	Phi value	P value
1	14	52	0.40	33
2	55	95	0.46	75
3	47	87	0.43	67
4 *	16	19	0.04	18
5	15	91	0.76	53
6	17	78	0.61	48
7 *	18	16	-	-
8	17	48	0.33	33
9	16	82	0.66	49

10 *	19	22	0.04	21
11	12	69	0.58	41
12	18	41	0.25	30
13	14	77	0.63	46
14	24	89	0.66	57
15	18	38	0.22	28
16 *	29	31	0.02	30
17	13	63	0.52	38
18	20	31	0.13	26
19	11	26	0.19	19
20	18	53	0.37	36
21	21	72	0.51	47
22	31	66	0.35	49
23	11	72	0.62	42
24 *	31	58	0.27	45
25	14	15	0.01	15

26	27	57	0.30	42
27 *	40	53	0.13	47
28	32	58	0.26	45
29 *	35	45	0.10	40
30 *	19	9	-	-
31 *	42	42	-	-
32	4	20	0.25	12
33	16	83	0.67	50
34 *	23	30	0.08	27
35	17	64	0.48	41
36 *	43	31	-	-
37	7	58	0.54	33
38	12	53	0.44	33
39	12	32	0.24	22
40 *	27	22	-	-
41	15	45	0.33	30

42	17	38	0.24	28
43	23	54	0.32	39
44 *	31	27	-	-
45	10	37	0.32	24
46	7	56	0.53	32
47	28	46	0.19	37
48 *	9	13	0.06	-
49 *	19	29	0.03	20
50	27	60	0.33	44
51	8	56	0.51	32
52 *	39	43	0.04	41
53	3	40	0.03	22
54 *	17	23	0.08	20
55 *	35	31	-	-
56	42	93	0.54	68
57	29	69	0.40	49

58	31	61	0.30	46
59	27	60	0.33	44
60	15	64	0.50	40
61	15	78	0.63	47
62	8	60	0.55	34
63	33	47	0.14	40
64	21	49	0.29	35
65 *	30	32	0.02	31
66	20	60	0.41	40
67 *	33	42	0.09	38
68	12	73	0.62	43
69	20	83	0.63	52

*Indicated rejected questions

The items indices in the draft scale have been scrutinized carefully while for

the final list. The investigator had to delete certain items which has high phi co-efficient as well as medium of p values.

FINAL SCALE

11. Establishing Reliability and Validity

Reliability

Reliability refers to the degree of consistency of score yield by the test on repeated occasions.

In the present investigator the reliability was found by split-half method. The score of odd items and even items were taken separately and correlations were calculated by using spearman formula of correlation. The reliability of the whole test was found as 0.730138.

Validity

A test is valid when it meets the purpose for which it was designed. The two types of validity established for this tool were face validity and content validity.

i) Face validity

Face validity means that given tool appears or seems to measure what it measure. The tool was submitted to a panel of experts and their opinions were

taken to measure the relevant objectives of the tool. A close look on the items of the tool reveals that each and every item is capable of measuring communicable diseases awareness.

ii) Content validity

Content validity of the test was also established by verifying the comprehensiveness of coverage of the content of the test using authentic literature and opinion of experts. They ascertained that the tool has moderate content validity, internal validity.

12. Final format of the test

The final of communicable diseases awareness consisted of 48 items. A copy of the communicable diseases awareness questionnaire is given in Appendix-C.

3.5 TOOLS USED FOR THE PRESENT STUDY

Tools were used for the collection of data upon which hypotheses may be tested. The selection of Suitable tool is the key to successful investigation. There large number of tools and techniques are available for data collection in research. In the present study the following tools were used.

i. Communicable diseases Awareness Test (constructed and validated by C. Bindhu and Mr.V.S. Pavithra Kumar).

ii. General data sheet.

i) Communicable diseases Awareness Test

In order to find out the communicable diseases awareness among Prospective Teachers "communicable diseases awareness test" was prepared and standardized by the investigator.

ii) General data sheet

The general data sheet serves to collect personal information. Prospective teachers were asked to write their Name, Name of the Institution, Gender, locality, Marital status, religion, community, types of management and educational qualification.

3.6 ADMINISTRATION OF THE TOOLS

For administration of test the investigator visited 9 colleges of education as per the schedule fixed. The permission for administering the tool was obtained from the principal of all colleges.

Before administering the tool the investigator explained the purpose of her study. The prospective teachers were given a copy of "General Data Sheet" and "Awareness on communicable diseases questionnaire" and the investigator explained the directions clearly. The questionnaires were collected from the prospective teachers after writing their responses.

3.7 SAMPLE FOR THE PRESENT STUDY

Sampling means selection of individual from the population in such a way that every individual has the equal chance to be important part of research. A sample is a small proportion of a population selected for observation and analysis.

The sample for the present study consisted of 400 prospective teachers studying in different colleges of students in Kanyakumari district. The investigator has adopted random sampling method.

Table 3.2

List of colleges selected for the present study

S.NO	Name of the colleges	No. of prospective teachers
1	S.R.K. college of education, Kulasekharam.	56
2	N.V.K.S.D. College of education, Attoor.	93
3	Pope John Paul II college of Education, Mamootukadai.	47
4	White Memorial college of Education, Chevaracode.	62
5	Muslim college of Education, Thiruvithancode.	36
6	Bethlahem college of Education, Karungal.	40
7	Immanuel Arasar college of Education, Nattalam.	15
8	R.P.A. College of Education, Mamootukadai.	23

9	Grace college of education, Padanthalumoodu.	28
	Total	400

3.8 DETAILS OF THE SAMPLE

A. GENDER WISE DISTRIBUTION OF SAMPLE

Table 3.3

Gender wise distribution of sample

SL.NO	Gender	Number of prospective teachers	Percentage
1	Male	35	8.75
2	Female	365	91.25
	Total	400	100

The sample consists of both male 35 and female 365. The percentage corresponding to male and female prospective teachers are 8.75% and 91.25% respectively is shown in the table 3.3.

B. LOCALE WISE DISTRIBUTION OF SAMPLE

Table 3.4

Locale wise distribution of sample

SL.NO	Locale	Number of prospective teachers	Percentage
1	Rural	255	63.75
2	Urban	145	36.25
	Total	400	100

The sample consists of both rural 255 and urban 145. The percentage corresponding to rural and urban prospective teachers are 63.75% and 36.25% respectively is shown in the table 3.4.

C. MARITAL STATUS WISE DISTRIBUTION OF SAMPLE

Table 3.5

Marital status wise distribution of sample

SL.NO	Marital status	Number of prospective teachers	Percentage
1	Single	335	83.75
2	Married	65	16.25
	Total	400	100

The sample consists of single 335, married 65. The percentage corresponding to single, married prospective teachers are 83.75% and 16.25% respectively is shown in the table 3.5.

D. RELIGION WISE DISTRIBUTION OF SAMPLE

Table 3.6

Religion wise distribution of sample

SL.NO	Religion	Number of prospective teachers	Percentage
1	Hindu	173	43.25
2	Christian	193	48.25
3	Muslim	34	8.50
	Total	400	100

The sample consist of Hindu 173, Christian 193, Muslim 34. The percentage corresponding to Hindu, Christian, Muslim prospective teachers are 43.25%, 48.25%, and 8.50% respectively is shown in the table 3.6.

E. COMMUNITY WISE DISTRIBUTION OF SAMPLE

Table 3.7

Community wise distribution of sample

SL.NO	Marital status	Number of prospective teachers	Percentage
1	FC	38	9.50
2	BC	326	81.50
3	MBC	36	9.00
	Total	400	100

The sample consist of FC 38, BC 326, MBC 36. The percentage corresponding to FC, BC, MBC prospective teachers are 9.50%, 81.50%, and 9.00% respectively is shown in the table 3.7.

F. TYPE OF MANAGEMENT WISE DISTRIBUTION OF SAMPLE

Table 3.8

Type of management wise distribution of sample

SL.NO	Type of management	Number of prospective Teachers	Percentage
1	Aided	80	20.00
2	Unaided	320	80.00
	Total	400	100

The sample consists of both aided 80, unaided 320. The percentage corresponding to Aided and unaided prospective teachers are 20% and 80% respectively is shown in the table 3.8.

G. EDUCATIONAL QUALIFICATION WISE DISTRIBUTION OF SAMPLE

Table 3.9

Educational qualification wise distribution of sample

SL.NO	Educational qualification	Number of prospective teachers	Percentage
1	UG	333	83.25
2	PG	67	16.75
	Total	400	100

The sample consists of both UG 333, PG 67. The percentage corresponding to UG and PG prospective teachers are 83.25% and 16.75% respectively is shown in the table 3.9.

3.9 STATISTICAL TECHNIQUES USED FOR ANALYSIS

Statistical techniques are important for any research. It helps the investigator to analysis and interprets the data meaningfully in the study. In the present study the investigator used the following statistical techniques.

- Arithmetic mean
- Standard deviation
- t-test
- ANOVA

1. Arithmetic Mean

The Arithmetic mean is the best known measure of central tendency. It may be defined as the separate scores or other measure divided by their numbers.

Mean is the most stable and it is suitable for statistical calculations.

$$\text{Mean} = A + \left(\frac{\sum fd}{N}\right) \times C$$

Where,

A - Assumed mean of the score obtained.

f - frequency of each class interval.

d - deviation of scores from the assumed mean

N - total frequency

C - Class interval of frequency

2. Standard Deviation

Standard deviation is the most widely used reliable and stable measured of dispersion. The square root of average of squares of all deviations of scores from the mean of a given series or frequency distribution is known as standard deviation.

$$\text{S.D } (\sigma) = \sqrt{\frac{\sum fd^2}{N} - \left(\frac{\sum fd}{N}\right)^2} \times C$$

Where

σ = Standard deviation

c = Length of the class interval

f = frequency

d = deviation of the scores from the assumed mean.

N = total sample

3. t-test(test of significance)

The t – test has a wide number of application in statistics. It can be used to test the significance of difference between the means of two independent groups . By using the mean and standard deviation of the two groups 't' value is to be calculated. The calculated t-value is compared with table value of t at 0.05 levels and 0.01 levels.

$$t = \frac{M_1 \sim M_2}{\sqrt{\frac{\sigma 1^2}{N_1} + \frac{\sigma 2^2}{N_2}}}$$

Where

X_1 = mean of the first group

X_2 = mean of the second group

σ = standard deviation of the first group

σ = standard deviation of the second group

N1 = sample size of the first group

N2 = sample size of the second group

4. **ANOVA**

Analysis of variance was employed to first out the different among the variables.

$$F = \frac{\text{Mean square variance between groups}}{\text{Mean square of variance within groups}}$$

CHAPTER IV

ANALYSIS AND

INTERPRETATION OF DATA

- **Preliminary Analysis**
- **Final Analysis**
- **Tenability of Hypotheses**

4.1 INTRODUCTION

The analysis of data is one of the important step in the research process. It means studying the organized material in order to discover the inherent facts. Once the research data have been collected and the analysis has been made, the researcher can proceed to the stage of results.

The data were studied from many analysis as possible to explore the new

facts. Analysis requires an alert, flexible and open mind. Statistical techniques have contributed greatly in gathering, organizing, analyzing and interpreting numerical data. Analysis leads to the interpretation of data and interpretation implies the techniques of drawing conclusions from analyzed and critical study of the data.

The data after collection have to processed and analyzed in accordance with the outline laid down for the purpose at the time of developing the research plan. This is essential for scientific study and for ensuring that we have all relevant data for making contemplated comparisons and analysis.

Analysis of the data is the most skilled task of all the stages of the research. It is a task calling for the researchers own judgement and skill. Analysis of data is the essential factor in its relevance to the solution of the problem for the most accurate handling, all data should be classified and interpreted for Prof. Wilkinson and Bhandaarkar, “Analysis of data involved a number of closely related operations that are performed with the purpose of summarizing the collected data and organizing these in such a manner that they will yield answer to the questions of suggest hypotheses”.

Thus the data collected from 400 school students were subjected to different types of statistical treatments such as percentage, mean, standard

deviation, t-test and ANOVA are used.

Analysis administered the research tool were collected and organized. The collected data are known as “raw data” the raw data are meaningless unless certain statistical treatment is given to them. Analysis of data means to make the raw data meaningful or to draw some results from the data after the proper treatment. The analysis of data serves the following main function.

- To obtain the significant results
- To test the null hypotheses

According to Kothari (1990) “this is essential for a scientific study and for ensuring that we have all relevant data for making contemplated comparisons and analysis. The form analysis refers to the computation of

certain measures along with searching for patterns of relationship that exists among data group”.

4.2PRELIMINARY ANALYSIS

Descriptive statistics for communicable diseases awareness

Table 4.1

Mean scores and standard deviation of prospective teachers

Category	Count	Arithmetic mean	Standard Deviation
Prospective teachers	400	17.79	8.5

From the above table it is clear that the total number of sample selected for the present study was 400. The arithmetic mean score obtained for the total sample was 17.79 and the standard deviation value was 8.5.

4.3 PERCENTAGE ANALYSIS FOR COMMUNICABLE DISEASES

Table 4.2

Percentage wise distribution of different levels of communicable diseases

Communicable diseases awareness	Count	Percentage
Low	50	12.50
Medium	289	72.25
High	61	15.25
Total	400	100

From the above table it is clear that the number of sample according to low, medium, and high levels of communicable diseases awareness were 50, 289,and 61. The corresponding percentage were 12.50, 72.25, 15.25 respectively. This

indicates that most of the prospective teachers have medium level of communicable diseases awareness.

4.4 FINAL ANALYSIS

Comparison of communicable diseases based on background variables

a) Gender wise comparison of communicable diseases

Two groups of prospective teachers namely male and female have been subjected for study as per the analysis given in the table 4.3.

Table 4.3

Comparison of Communicable diseases awareness based on gender

Gender	Mean	SD	N	t	P	Remark
Male	17.57	5.46	35	0.233	0.816	NS
Female	17.81	8.75	365			

The calculated 't' value (0.233) p >0.05 is not significant at any level. Therefore the null hypotheses "There exists no significant difference in the means scores of communicable diseases awareness among prospective teachers based on gender" is accepted. That is communicable diseases awareness among prospective teachers does not differ statistically with their gender.

b) Locale wise comparison of prospective teachers

Two groups of prospective teachers namely rural and urban have been subjected for study as per analysis given in the table 4.4

Table 4.4

Comparison of Communicable diseases awareness based on locale

Locale	Mean	SD	N	t	p	Remark
Rural	18.73	9.29	255	3.233	0.001	Sig. at 0.01 level
Urban	16.14	6.63	145			

The calculated ‘t’ value (3.233) $p < 0.01$ which is significant at 0.01 level. Therefore the null hypotheses, “There exists no significant difference in the means scores of communicable diseases awareness among prospective teachers based on locale” is rejected. That is communicable diseases awareness among prospective teachers differs statistically with their locale. The mean value (18.73) showed that rural prospective teachers possess more favorable in the communicable diseases awareness than urban prospective teachers.

c) Marital status wise comparison of prospective teacher

Two groups of prospective teachers namely single and married have been subjected for study as per analysis given in the table 4.5

Table 4.5

Comparison of Communicable diseases awareness based on marital status

Marital status	Mean	SD	N	t	p	Remark
Single	17.06	7.50	335	2.956	0.003	Sig. at 0.01 level
Married	21.57	11.85	65			

The calculated 't' value (2.956) $p < 0.01$ which is significant at 0.01 level. Therefore the null hypotheses, "There exists no significant difference in the means scores of communicable diseases awareness among prospective teachers based on marital status" is rejected. That is communicable diseases awareness among prospective teachers differ statistically with their marital status. The mean value (21.57) showed that married prospective teachers possess more favorable in the communicable diseases awareness than single prospective teachers.

d) Religion wise comparison of prospective teachers

Three groups of prospective teachers namely Hindu, Christian and Muslim have been subjected for study as per analysis given in the table 4.6

Table 4.6

Comparison of Communicable diseases awareness based on religion

Religion	Mean	SD	Source	Sum of squares	df	Mean square	F	P	Remark
Hindu	18.88	8.87	Between Gp	1728.6	2	864.29	68.34	0.000	Sig. at 0.01 level
Christian	17.99	7.87	Within Gp	27131.2	397	68.34			
Muslim	11.12	7.18	Total	28859.8	399				

The calculated value F (12.647) $p < 0.01$ which is significant at 0.01 level. Therefore the null hypotheses, “There exists no significant difference in the means scores of communicable diseases awareness among prospective teachers based on religions” is rejected. That is communicable diseases awareness among prospective teachers differ statistically with their religion.

The result does not help to identify exactly the pair of groups which differ

significantly. Hence Scheffe's multiple comparison is used for further analysis.

e) Religion wise comparison of Scheffe's procedure for Communicable diseases awareness

Table 4.7

Comparison of Scheffe's procedure for Communicable diseases awareness based on religion

Religion	N	Pair	P(Scheffe)	Remark
Hindu (A)	173	A Vs B	0.590	NS
Christian (B)	193	B Vs C	0.000	Sig. at 0.01 level
Muslim (C)	34	A Vs C	0.000	Sig. at 0.01 level

The result showed that the pair Hindu and Christian (A Vs B) do not differ in their communicable diseases awareness among prospective teachers. The other two pair Christian and Muslim (B Vs C) and Hindu and Muslim (A Vs C)

have significant difference in their communicable diseases awareness among prospective teachers. The mean value (18.88) showed that Hindu prospective teachers possess more favorable in the communicable diseases awareness than Christian and Muslim prospective teachers.

f) Community wise comparison of prospective teachers

Three groups of prospective teachers namely FC, BC and MBC have been subjected for study as per analysis given in the table 4.8.

Table 4.8

Comparison of Communicable diseases awareness based on community

Community	Mean	SD	Source	Sum of squares	df	Mean square	F	P	Remark
FC	23.84	11.9	Between Gp	1537.58	2	768.79			

BC	17.14	7.78	Within Gp	27322.20	397	768.79	11.171	0.000	Sig. at 0.01 level
MBC	17.31	8.31	Total	28859.78	399				

The calculated value F (11.171) $p < 0.01$ which is significant at 0.01 level. Therefore the null hypotheses, "There exists no significant difference in the means scores of communicable diseases awareness among prospective teachers based on community" is rejected. It showed that there exists significant difference in the FC, BC, and MBC prospective teachers.

The result does not help to identify exactly the pair of groups which differ significantly. Hence Scheffe's multiple comparison is used for further analysis.

g) Community wise comparison of Scheffe's procedure for Communicable diseases Awareness

Table 4.9

Comparison of Scheffe's procedure for Communicable diseases Awareness based on community

Community	N	Pair	P(Scheffe)	Remark
FC (A)	38	A Vs B	0.000	Sig. at 0.01 level
BC (B)	326	B Vs C	0.993	NS
MBC (C)	36	A Vs C	0.004	Sig. at 0.01 level

The result showed that the pair BC and MBC (B Vs C) do not differ in their communicable diseases awareness among prospective teachers. The other two pair FC and BC (A Vs B) and FC and MBC (A Vs C) have significant difference in their communicable diseases awareness among prospective teachers. The mean value (23.84) showed that FC prospective teachers possess more favorable in the communicable diseases awareness than BC and MBC prospective teachers.

h) Type of Management wise comparison of prospective teachers

Two groups of prospective teachers namely Aided and Unaided have been subjected for study as per analysis given in the table 4.10.

Table 4.10

Comparison of Communicable diseases awareness based on Type of Management

Type of Management	Mean	SD	N	t	p	Remark
Aided	18.66	8.81	80	0.989	0.323	NS
Unaided	17.58	8.43	320			

The calculated 't' value (0.989) $p > 0.05$ is not significant at any level. Therefore the null hypotheses "There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on type of management" is accepted. It showed that there exists no significant difference between aided and unaided prospective teachers. That is communicable diseases awareness among prospective teachers does not differ statistically with

their type of management.

i) Educational Qualification wise comparison of prospective teachers

Two groups of prospective teachers namely UG and PG have been subjected for study as per analysis given in the table 4.11

Table 4.11

Comparison of Communicable diseases awareness based on Educational Qualification

Educational Qualification	Mean	SD	N	t	p	Remark
UG	17.23	8.19	333	2.679	0.01	Sig. at 0.01 level
PG	20.57	9.52	67			

The calculated ‘t’ value (2.679) $p \leq 0.01$ which is significant at 0.01 level. Therefore the null hypotheses, “There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on Educational qualification” is rejected. It showed that there exists significant difference between UG and PG prospective teachers. That is communicable diseases awareness among prospective teachers differs statistically with their Educational qualification. The mean value (20.57) showed that PG prospective teachers possess more favorable in the communicable diseases awareness than UG prospective teachers.

4.4 TENABILITY OF HYPOTHESES

1. The first null hypotheses “There exists no significant difference in the means scores of communicable diseases awareness among prospective teachers based on gender” is accepted.

2. The second null hypotheses “There exists no significant difference in the means scores of communicable diseases awareness among prospective

teachers based on locale" is rejected.

3. The third null hypotheses "There exists no significant difference in the means scores of communicable diseases awareness among prospective teachers based on marital status" is rejected.

4. The fourth null hypotheses "There exists no significant difference in the means scores of communicable diseases awareness among prospective teachers based on religion" is rejected.

5. The fifth null hypotheses "There exists no significant difference in the means scores of communicable diseases awareness among prospective teachers based on community" is rejected.

6. The sixth null hypotheses "There exists no significant difference in the means scores of communicable diseases awareness among prospective teachers based on type of management" is accepted.

7. The seventh null hypotheses "There exists no significant difference in the means scores of communicable diseases awareness among prospective teachers based on educational qualification" is rejected.

CONCLUSIONS AND SUGGESTIONS

- **The study in Retrospect**
- **Objectives of the study**
- **Hypotheses**
- **Methodology in Brief**
- **Major Findings and Conclusions**
- **Educational Implications of the study**

5.1 THE STUDY IN RETROSPECT

The study under investigation is entitled as Awareness on Communicable diseases among Prospective Teachers. This chapter attempts to summarize all the findings and conclusions drawn from the present investigation, the educational implications of the study and suggestions for further research are also given.

5.2 OBJECTIVES OF THE STUDY

1. To construct and validate a tool for measuring the awareness on communicable diseases among prospective teachers.

2. To compare the mean scores of awareness on communicable diseases based on the background variables such as

a) Gender

b) Locale

c) Marital status

d) Religion

e) Community

f) Type of management

g) Educational qualification

5.3 HYPOTHESES FRAMED

1. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on Gender.

2. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on Locale.

3. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on Marital status.

4. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on Religion.

5. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on Community.

6. There exists no significant difference in the mean scores of communicable

diseases awareness among prospective teachers based on Type of management.

7. There exists no significant difference in the mean scores of communicable diseases awareness among prospective teachers based on Educational qualification.

5.4 METHODOLOGY IN BRIEF

Method adapted

Normative survey method was used for this study.

Sample

The present study was conducted on a sample of 400 prospective teachers from various colleges of Education in Kanyakumari district using random sampling technique. The sample selected differ in gender, locale, marital status, religion, community, type of management and educational qualification.

Tools used

The tools used for the present study were,

i. Communicable diseases awareness test constructed and validated by C.Bindhu and Mr.V.S.Pavithra Kumar.

ii. General data sheet.

Data collection procedure

The investigator visited and selected 9 colleges in Kanyakumari district. Proper instructions were given by the investigator. Prospective teachers was instructed to read the statements carefully and mark their responses in the reponse sheet.

Scoring and tabulation

The collected data were scored systematically using a scoring key prepared by the investigator. Each item consists of four answers. From that answers only one is correct. Each correct answer was given one mark.

Statistical techniques used

For the analysis of the data collected, following statistical techniques were adopted, t-test, ANOVA followed by Scheffe's procedure.

5.5 MAJOR FINDINGS

Following were the important findings of the present investigator.

1) There exists no significant difference between male and female prospective teachers in their communicable diseases awareness. This finding is supported by the following result (t-0.233; $p>0.05$ which is not significant at any level).

2) There exists significant difference between rural and urban prospective teachers in their communicable diseases awareness. This finding is supported by the following result (t-3.233; $p<0.01$ which is significant at 0.01 level). The mean value (18.73) showed that rural prospective teachers possess more favorable in the communicable diseases awareness than urban prospective teachers.
3) There exists significant difference between single and married prospective teachers in their communicable diseases awareness. This finding is supported by the following result (t-2.956; $p<0.01$ which is significant at 0.01 level). The mean value (21.57) showed that married prospective teachers possess more favorable in the communicable diseases awareness than single prospective teachers.
4) There exists significant difference between Hindu, Christian and Muslim prospective teachers in their communicable diseases awareness. This finding is supported by the following result (F-12.647; $p<0.01$ which is significant at 0.01 level).
5) The result from Scheffe's procedure showed that the pair Hindu and Christian (A Vs B) do not differ in their communicable diseases awareness among prospective teachers. The other two pair Christian and Muslim (B Vs C) and Hindu and Muslim (A Vs C) have significant difference in their communicable diseases awareness among prospective teachers. The mean

value (18.88) showed that Hindu prospective teachers possess more favorable in the communicable diseases awareness than Christian and Muslim prospective teachers.

6) There exists significant difference between FC, BC and MBC prospective teachers in their communicable diseases awareness. This finding is supported by the following result (F-11.171; $p<0.01$ which is significant at 0.01level).

7) The result from Scheffe's procedure showed that the pair BC and MBC (B Vs C) do not differ in their communicable diseases awareness among prospective teachers. The other two pair FC and BC (A Vs B) and FC and MBC (A Vs C) have significant difference in their communicable diseases awareness among prospective teachers. The mean value (23.84) showed that FC prospective teachers possess more favorable in the communicable diseases awareness than BC and MBC prospective teachers.

8) There exists no significant difference between Aided and Unaided prospective teachers in their communicable diseases awareness. This finding is supported by the following result (t-0.989; $p>0.05$ which is not significant at any level.

9) There exists significant difference between UG and PG prospective teachers in their communicable diseases awareness. This finding is supported by the following result (t-2.679; $p\leq0.01$ which is significant at

0.01 level. The mean value (20.57) showed that PG prospective teachers possess more favorable in the communicable diseases awareness than UG prospective teachers.

5.6 CONCLUSIONS

In conclusion, it can be stated that a considerable proportion of the prospective teachers have average level of communicable diseases awareness.Locale, Marital status, Religion, Community, and Educational qualification of prospective teachers have influence on the communicable diseases awareness. Rural prospective teachers possess more favorable in the communicable diseases awareness than urban prospective teachers. Married prospective teachers possess more favorable in the communicable diseases awareness than single prospective teachers. Hindu prospective teachers possess more favorable in the communicable diseases awareness than christian and muslim prospective teachers. Forward caste prospective teachers possess more favorable in the communicable diseases awareness than backward caste and most backward caste prospective teachers. Post graduate prospective teachers possess more favorable in the communicable diseases awareness than under graduate prospective teachers. Gender and type of management prospective teachers have not influence on the communicable diseases awareness.

5.7 EDUCATIONAL IMPLICATIONS OF THE STUDY

- Awareness of communicable diseases in highly essential for the healthy

life. So measures to be taken to develop the awareness of communicable diseases among prospective teachers.

- The healthy body and awareness of communicable diseases are closely related. Therefore the prospective teachers should help the students in developing and maintaining healthy body.
- It also reveals the need for effective guidance and counseling program for developing knowledge about communicable diseases to overcome difficulties and develop healthy body and healthy nation.
- More attention has to be given through the government and state level activities.
- School level activities about health and health education to be encouraged among students.
- Awareness can be created through programs like drama in festivals and college functions.
- Adequate provisions should be provided to make them conscious about communicable diseases.
- The high school and higher secondary school students can trigger projects related to social activity along with their studies.
- In the education system, health education has to include along with

regular subjects and health educator can teach the necessity and its importance.

- ❖ Students pursuing higher and research activities in communicable diseases related studies in India are very few. People have to be made aware about the importance of health science subjects and encourage the younger generation to solve current communicable diseases related problems.

- ❖ Students should be encouraged to use mass media to get more information about communicable diseases.

5.8 SUGGESTIONS FOR FURTHER SYUDY

1. The present study is confined only to kanyakumari district. Similar studies can be conducted among other students throughout Tamil Nadu.
2. The study is conducted on prospective teachers only. Similar studies can be conducted to other professional course also.

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APPENDICES

APPENDIX-A

N.V.K.S.D. COLLEGE OF EDUCATION, ATTOOR

KANYAKUMARI DISTRICT

GENERAL DATA SHEET

INSTRUCTIONS

Certain personal matters related to you are required for my research purpose. kindly write below or put a tick mark(✓) wherever necessary. Your response will be kept confidentially.

Name :

Name of the Institution :

Gender	:	Male / Female
Locale	:	Rural / Urban
Martial status	:	Single / Married
Religion	:	Hindu / Christian / Muslim
Community	:	FC / BC / MBC / SC / ST
Type of Management	:	Aided / Unaided
Educational qualification	:	

APPENDIX-B

N.V.K.S.D. COLLEGE OF EDUCATION, ATTOOR

COMMUNICABLE DISEASES AWARENESS QUESTIONNAIRE

DRAFT

Prepared by (Mrs.C.Bindhu & Mr.V.S.Pavithra Kumar)

INSTRUCTIONS

Certain statements related to communicable diseases are given below. Read carefully each statement and put a tick mark (✓) on the choices preferred, attend all the statements without omission your response will be kept confidential and used for research purpose only.

1. Causative organism of malaria is

    a. Plasmodium b. Falciparum

    c. Baterium d. Plasmodium Falciparum

2. Malaria is spread by

    a. Anopheles mosquito b. House fly

    c. Insects d .Bacteria

3. Which of the following is the primary symptom of malaria

    a. Joint pain b. Chest pain

    c. Fever d. Loss of body weight

4. Which drug is used to cure the malaria ?

    a. Chlromycine b. Antitoxic

c. Terramycine d. Quinine

5. Cauative organism of cholera is

a. Virus b. Bacillus

c. Typhoid bacillus d. Vibrio cholerae

6. Which of the following is the primary symptoms of cholera ?

a. Headache and fever b. Chest pain and Joint pain

c. Diarrhoea and Vomiting d .Thickening of the skin

7. Incupation period of cholera is

a. 24 hours to 5 days b. 1 day to 7 days

c. 10 to 15 days d. 3 to 8 days

8. Cholera is spread by

a. Contaminated food b. Contaminated water

c. Both (a) and (b) d. None of the above

9. How cholera can be prevent?

a. Water should be boiled before it is used

b. Wells and ponds should be cleaned

c. Close contact with patients to be avoided d. All the above

10. Causative agent of Bacillary dysentery is

a. Shigella b. Virus

c. Bacteria d. Fungai

11. Causative agent of Amoebic dysentery is

a. Entamoeba histolytica b. Protozoa

c. Amoeba d. Virus

12. Dysentery is spread by

a. Contaminated food and water b. Water taps and lavatory seats

c. Both (a) and (b) d. None of the above

13. Dysentery can be prevented by

a. Hygiene and sanitation play important role

b. Flies should be avoided

c. Food items, drinks and other eatables should be properly covered

d. All the above

14. Which of the following is the primary symptoms of dysentery

a. Fever b. Cough

c. Headache d. Stomach trouble

15. Diphtheria affects the children between the age

a. 12 to 14 years b.14 to 16 years

c. 3 to 12 years d. 4 to 6 years

16. Diphtheria is spread by

a. Flies b. Childrens play materials

c. Both (a) and(b) d. None of the above

17. Which of the following is the symptoms of Diphtheria ?

a. Swelling in the neck and fluid comes out of it b. Glands get pain

c. Jaw get pain d. None of the above

18. Incubation period of Diphtheria is

a. 6 - 10 days b. 2 - 5 days

c. 8 - 10 days d.12 - 16 days

19. Which of the following antibiotics is used to cure the Diphtheria ?

a.Diphtheria b.Diptheria antitoxin

c.Penicillin d.both (b) and (c)

20. Causative organism of Diphtheria is

a. Streptococcus b.Cyanobacteriumbacterium diphtheria

c. Plasmodium d. Corynebacterium diphtheria

21. Mumps affects the children between the age

a. 5 - 15 years b. 20 - 25 years

c. 15 - 20 years d. 21 -27 years

22. Which of the following is the affected organs of Mumps ?

a. Pitutary glands b. Parotid glands

c. Tongue d. Lungs

23. Which of the following is the symptoms of Mumps ?

a. Glands under jaw get pain and swelling

b. Similar pain and swelling appears under ears also

c. Both (a) and (b)

d. None of the above

24. Causative organism of Mumps is

a. Para virus b. Paramyxo virus

c. Streptococcus d. Streptophilus

25. Mumps can be prevented by

a. Jeryl Lynn strain b. Streptomycin

c. Strain vaccine d. Live vaccine

26. Causative organism of Measles is

a. Herpes virus b. Rubeola virus

c.Varicella d. Myxovirus

27. Symptoms of measles is

a.Headache b.Jointpain

c.Cough and Fever d.Leg pain

28. Causative organism of Whooping cough is

a.Pertusis b.Bordetella

c.Bordetella Pertusis d.Streptomycin

29. Incubation period of whooping cough is

a.10 - 12 days b.2 Weeks c.4 weeks d.6 - 10 days

30. Whooping cough is spread by

a.coughing and sneezing b.droplets and fomites

c.breath and discharges d.coughing and spitting

31. Primary symptoms of whooping cough is

a.Vomiting loss of body weight

b.Cough followed by vomiting whoop may be absent

c.Temperature rises gradually dropping slightly each morning

d.None of the above

32. Which of the following drugs used to cure Whooping cough ?

a.Tetracycline b.Chloromycin

c.Triple vaccine (D.P.T) d.All the above

33. Chicken pox is caused by

a.Bacteria b.Protozoa

c.Worms d.Virus

34. Primary symptoms of chicken pox is

a.Fever b.Vomiting coughing

c.Chest pain, Joint pain d.feverish symptoms not very severe

35. Tuberculosis is spread by

a.Coughing b.Spitting

c. both (a) and (b) d.None of the above

36. Which of the following vaccine is used to prevent the tuberculosis ?

a.Terramycin b.Aurenmycin

c.BCG vaccine d.Chloromycin

37. Which of the following is the primary symptoms of small Pox ?

a.Chill & headache b.Severe pain in the back

c.The colour of the face becomes red d.All the above

38. Scarlet fever attack children between the age

a.5 to 10 years b. 8 to 15 years

c.15 to18 years d.19to 25 years

39. Symptoms of scarlet fever is

a.Pain in throat b. Skin gets dry and eruptions

c.Both (a) and (b) d. Head ache

40. Which of the following vaccine used to cure scarlet fever ?

a.B.C.G Vaccine b.Toxin

c.Streptomycin d.Antitoxin

41. Which test is used to find the infection of scarlet fever ?

a.Dick Test b.ELISA Test

c.Blood Test d.Western blot Test

42. Which of the following is the primary symptoms of Influenza ?

a.High fever b.Pain in the body

c.Cold shivering d.Weakness of the whole system

43. Influenza is spread by

a.Sneezing b.Sputum

c.Both (a) and (b) d.None of the above

44. Causative organism of Influenza

a.Paravirus b.Myxovirus

c.Mumps virus d.RNA virus

45. Influenza is controlled by

a.Painting of throat twice

b.Thrice a day with Mandal's solution

c. Spraying the throat with colloidal iodine

d.All the above

46. Symptoms of conjunctivitis is

a. Watering profusely from the eyes

b. A painful itching in the eyes starts

c. Eyes become red and swollen

d. All the above

47. Which of the following drug is used to cure conjunctivitist ?

a. Terramycine eye ointment may be used

b. Separate towel used

c. Avoid seeing a patient suffering from this disease

e. Cold water used to wash eyes

48. AIDS can be treated by the following methods ?

a.AL-721 b.AL-240

c.AL-156 d.AL-140

49. Symptoms of Rheumatism is

a.Fever and pain b.Headache

c.Leg pain d.Stomach pain

50. Gonorrhoea is a

a.Viral disease b.Bacterial disease

c.Venereal disease d.Skin disease

51. Causative Organism of Gonorrhoea is

a.Neisseria b.Diplococcus

c.Neisseria necrosis d.Neisseria gonorrhea

52. Incubation period of Gonorrhoea is

a.5- 14 days b.2 - 8 days

c.14 - 18 days d.21- 27 days

53. Which of the following drug is used to cure Gonorrhoea

a.Panicillin G plus probenecid b.Amphicillin plus probenecid

c.Streptomycin d.All the above

54. Causative agent of syphilis is

a. Venereal syphilis b.Treponema syphilis

c.Treponema pallidum d.Bacterial syphilis

55. Which of the following drug is used to cure syphilis ?

a.Streptomycin b.Penicillin

c.B.C.G. vaccine d.Tetracyclin

56. Causative organism of AIDS is

a.DNA virus b.HIV virus

c.Retro virus d.RNA virus

57. Causative Organism of leprosy is

a.Mycobacterium b.Treponema leprae

c.Mycobacterium leprae d.Treponema pallidum

58. Incubation period of leprosy is

a.2 - 3 years b.2 - 5 years

c.3 - 8 years d.4 - 9 years

59. Which of the following drug used to cure leprosy ?

a.Ssulphone b.Diphenyl

c. Diphenyl-diamino sulphone d. Diamino- diphenyl sulphone

60. AIDS is diagnosed by the following tests

a.ELISA b.Western test

c.Western blotting d.ELISA and western blotting

61. The causative organism of polio is

a. Poliovirus b. RNA virus

b. c. Retro virus d. Entero virus

62. Symptoms of poliomyelitis is

a. Fever b. Headache

c. Sore throat d. All the above

63. Incubation period of poliomyelitis is

a. 5-8days b. 3-4days c. 8-13days d.15-17days

64. Polio can be prevented by

a. Sabin vaccine b. B.C.G vaccine

b. c. Streptomycin d.Terramycin

65. Causative organism of chikungunya is

a. Plasmodium b. Alpha virus

b. c. Bacillus d. Vibrio cholera

66. Chickungunya can be prevented by

a. Drinking boiled water

b. b.Keeping away the affected person

c Avoiding mosquito by using mosquito net

c. Using insecticides

67. Causative organism of dengue is

a. bacillus b. mycobacterium

c. Flavi virus d. Plasmodium

68. Which of the following is the symptoms of dengue is

a. Fever b. Head ache

b. c. Joint pain d. All the above

69. Symptoms of AIDS is

a. The blood platelet count is lowered.

b. The WBC count is reduced

c. The AIDS patients initially show fever like that of flu

d. d. All the above

APPENDIX-C

FINAL DRAFT

N.V.K.S.D. COLLEGE OF EDUCATION, ATTOOR

COMMUNICABLE DISEASES AWARENESS QUESTIONNAIRE

Prepared by (Mrs.C.Bindhu & Mr.V.S.Pavithra Kumar)

INSTRUCTIONS

Certain statements related to communicable diseases are given below. Read carefully each statement and put a tick mark (✓) on the choices preferred, attend all the statements without omission your response will be kept confidential and used for research purpose only.

1. Causative organism of malaria is

   a.Plasmodium b.Falciparum

   c.Baterium d.Plasmodium Falciparum

2. Malaria is spread by

   a.Anopheles mosquito b.House fly

   c.Insects d.Bacteria

3. Which of the following is the primary symptom of malaria

   a.Joint pain b.Chest pain

c.Fever d.Loss of body weight

4. Cauative organism of cholera is

a.Virus b.Bacillus

c.Typhoid bacillus d.Vibrio cholera

5. Which of the following is the primary symptoms of cholera ?

a.Headache and fever b. Chest pain and Joint pain

c.Diarrhoea and Vomiting d .Thickening of the skin

6. Cholera is spread by

a. Contaminated food b. Contaminated water

c. Both (a) and (b) d. None of the above

7. How cholera can be prevent ?

a.Water should be boiled before it is used

b. Wells and ponds should be cleaned

c. Close contact with patients to be avoided d. All the above

8. Causative agent of Amoebic dysentery is

a.Entamoeba histolytica b.Protozoa

c.Amoeba d.Virus

9. Dysentery is spread by

a.Contaminated food and water b.Water taps and lavatory seats

c.Both (a) and (b) d.None of the above

10. Dysentery can be prevented by

a.Hygiene and sanitation play important role

b.Flies should be avoided

c.Food items ,drinks and other eatables should be properly covered

d.All the above

11. Which of the following is the primary symptoms of dysentery

a.Fever b.Cough

c.Headache d.Stomach trouble

12. Diphtheria affects the children between the age

a. 12 to 14 years b.14 to 16 years

c. 3 to 12 years d. 4 to 6 years

13. Which of the following is the symptoms of Diphtheria ?

a.Swelling in the neck and fluid comes out of it b.Glands get pain

c.Jaw get pain d.None of the above

14. Incubation period of Diphtheria is

a.6 - 10 days b.2 - 5 days

c.8 - 10 days d.12 - 16 days

15. Which of the following antibiotics is used to cure the Diphtheria ?

a.Diphtheria b.Diptheria antitoxin

c.Penicillin d.both (b) and (c)

16. Causative organism of Diphtheria is

a.Streptococcus b.Cyanobacteriumbacterium diphtheria

c.Plasmodium d.Corynebacterium diphtheria

17. Mumps affects the children between the age

a. 5 - 15 years b.20 - 25 years

c.15 - 20 years d.21 -27 years

18. Which of the following is the affected organs of Mumps ?

a.Pitutary glands b.Parotid glands

c.Tongue d.Lungs

19. Which of the following is the symptoms of Mumps ?

a.Glands under jaw get pain and swelling

b.Similar pain and swelling appears under ears also

c.Both (a)and (b)

d.None of the above

20. Causative organism of Measles is

a.Herpes virus b.Rubeola virus

c.Varicella d.Myxovirus

21. Causative organism of Whooping cough is

a.Pertusis b.Bordetella

c.Bordetella Pertusis d.Streptomycin

22. Which of the following drugs used to cure Whooping cough ?

a.Tetracycline b.Chloromycin

c.Triple vaccine (D.P.T) d.All the above

23. Chicken pox is caused by

a.Bacteria b.Protozoa

c.Worms d.Virus

24. Tuberculosis is spread by

a.Coughing b.Spitting

c. (a) and (b) d.None of the above

25. Which of the following is the primary symptoms of small Pox ?

a.Chill & headache

b.Severe pain in the back

c.The colour of the face becomes red

d.All the above

26. Scarlet fever attack children between the age

a.5 to 10 years b. 8 to 15 years

c.15 to18 years d.19to 25 years

27. Symptoms of scarlet fever is

a.Pain in throat b. Skin gets dry and eruptions

c.Both (a) and (b) d. Head ache

28. Which of the following is the primary symptoms of Influenza ?

a.High fever b.Pain in the body

c.Cold shivering d.Weakness of the whole system

29. Influenza is spread by

a.Sneezing b.Sputum

c.Both (a) and (b) d. None of the above

30. Influenza is controlled by

a. Painting of throat twice

b. Thrice a day with Mandal's solution

c. Spraying the throat with colloidal iodine

d. All the above

31. Symptoms of conjunctivitis is

a.Watering profusely from the eyes

b.A painful itching in the eyes starts

c.Eyes become red and swollen

d.All the above

32. Which of the following drug is used to cure conjunctivitist ?

a.Terramycine eye ointment may be used

b.Separate towel used

c.Avoid seeing a patient suffering from this disease

e.Cold water used to wash eyes

33. AIDS can be treated by the following methods ?

a.AL-721 b.AL-240

c.AL-156 d.AL-140

34. Causative Organism of Gonorrhoea is

a.Neisseria b.Diplococcus

c.Neisseria necrosis d.Neisseria gonorrhea

35. Which of the following drug is used to cure Gonorrhoea

a.Panicillin G plus probenecid b.Amphicillin plus probenecid

c.Streptomycin d.All the above

36. Causative agent of syphilis is

a. Venereal syphilis b.Treponema syphilis

c.Treponema pallidum d.Bacterial syphilis

37. Causative organism of AIDS is

a.DNA virus b.HIV virus

c.Retro virus d.RNA virus

38. Causative Organism of leprosy is

a. Mycobacterium b. Treponema leprae

c.Mycobacterium leprae d.Treponema pallidum

39. Incubation period of leprosy is

a.2 - 3 years b.2 - 5 years

c.3 - 8 years d.4 - 9 years

40. Which of the following drug used to cure leprosy ?

a.Sulphone b.Diphenyl

c. Diphenyl-diamino sulphone d. Diamino- diphenyl sulphone

41. AIDS is diagnosed by the following tests

a.ELISA b.Western test

c.Western blotting d.ELISA and western blotting

42. The causative organism of polio is

a. Poliovirus b. RNA virus

c. Retro virus d. Entero virus

43. Symptoms of poliomyelitis is

b. Fever b. Headache

c. Sore throat d. All the above

44. Incubation period of poliomyelitis is

a. 5-8days b. 3-4days

c. 8-13days d.15-17days

45. Polio can be prevented by

c. Sabin vaccine b. B.C.G vaccine

d. c. Streptomycin d.Terramycin

46. Chickungunya can be prevented by

a. Drinking boiled water

b. b.Keeping away the affected person

c. Avoiding mosquito by using mosquito net

d. d. Using insecticides

47. Which of the following is the symptoms of dengue is

a.Fever b. Head ache

c. Joint pain d. All the above

48. Symptoms of AIDS is

e. The blood platelet count is lowered.

f. b. The WBC count is reduced

g. The AIDS patients initially show fever like that of flu

h. d. All the above

SCORING KEY

Sl.No	ANSWERS
1	d. Plasmodium Falciparum
2	a. Anopheles mosquito
3	b. Fever
4	d. Quinine
5	c. vibrio cholera
6	d. Diarrhoea and vomiting
7	a. 24 hours to 5 days
8	b. Both (a) &(b)
9	d. All the above
10	a. Shigella

11	a. Entamoeba histolyt ica
12	c. Both (a) & (b)
13	d. All the above
14	d. Stomach trouble
15	c. 3 to 12 years
16	c. Both (a) & (b)
17	a. swelling in the neck and fluid comes out of it.
18	b. 2-5 days
19	d. Both (b) & (c)
20	d. Corynebacterium diphtheria
21	a.5-15 years
22	c. Parotid glands
23	c. Both (a) & (b)
24	b. Paramyxo virus
25	a. Jeryl Lynn strain
26	b. Rubeola virus
27	c. Cough and Fever
28	c. Bordetella Pertusis
29	b. 2 weeks
30	d. breath and discharges
31	b. cough followed by vomiting whoop may be absent.
32	d. All the above
33	d. Virus
34	a. Fever

35	c. Both (a) & (b)
36	c. BCG vaccine
37	d. All the above
38	a.5 to 10 years
39	c. Both (a) & (b)
40	b. Toxin
41	a. Dick test
42	a. High fever
43	c. Both(a) and (b)
44	b. Myxovirus
45	d. All the above
46	d. All the above
47	a. Terramycine eye ointment may be used
48	a. AL-721
49	a. Fever and pain
50	c. venereal disease
51	d. Neisseria gonorrhea
52	b. 2-8 days
53	d. All the above
54	c. Treponema pallidum
55	b. Peniuillin
56	b. HIV virus
57	c. Mycobacterium leprae
58	b. 2-5 years

59	d. Diamino
60	d. ELISA and western blotting
61	a.Polio virus
62	d. All the above
63	b. 3-4 days
64	a. Sabin vaccine
65	b. Alpha virus
66	c. Avoiding mosquito by using mosquito net.
67	b. flavi virus
68	d. All the above
69	d. All the above