HEALTH AWARENESS AMONG HIGHER SECONDARY STUDENTS IN KANYAKUMARI DISTRICT

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by

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DECLARATION

I hereby declare that this dissertation **"HEALTH AWARENESS AMONG HIGHER SECONDARY STUDENTS IN KANYAKUMARI DISTRICT"** has been originally carried out by me under the guidance and supervision on **Dr. V.S. Minikumari,** Associate professor in Biological Science, N.V.K.S.D College of Education, Attoor, Kanyakumari District and this dissertation has not been submitted to any other University for the award of any other Degree (or) Diploma.

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CERTIFICATION

This is to certify that this dissertation entitled **"HEALTH AWARENESS AMONG HIGHER SECONDARY STUDENTS IN KANYAKUMARI DISTRICT"** submitted for the M.Ed Degree by **Asha. S.M** is a record of research work done by her under my guidance and supervision. It is further certified that the work is and original one and free from any kind of duplication.

Place : Attoor

Date : 10-06 2014 **Dr. V.S. MINIKUMARI**

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Good health is the greatest boon. It is a gift of God to man. It is one of the most precious possessions of man. Good health is a blessing. For an unhealthy man there is no charm in this world. Health is the greatest wealth for a man. We all are quite familiar with the famous lines of Alexander Pope:

"Early to bed and early to rise"

"Makes a man healthy, wealthy and wise"

There is an old saying, "Sound mind in a sound body". It means that when the body is healthy, the mind is healthy. A sack body cannot have healthy mind. The attitude of such people to life is also gloomy. They have a negative approach to it. On the other hand, a healthy man has a completely changed outlook. He enjoys each and every thing. He enjoys the every moment of his life.

"Health is wealth". If health is lost, everything lost. If health is lost, the capacity to work is lost. Inability to work leads to poverty and misery. On the other

hand, if we have health we are able to work and this, in turns to our wealth. Therefore good health is one of the basic foundations on which our lives are built.

For the common man, health is merely an absence of sickness and aliments. This view is narrow and one sided. The term 'health' is much more comprehensive. Good health is the state of all round physical, social and mental well being of a person, which enables him to live and work normally and to resist the negative impact of his environment.

Healthy person is in better positions to relax and enjoy the thrill of life. On the other hand, an unhappy person finds it difficult to be happy, and joyful. Physical ailments bring in pain, sorrow, mental tension and sleepless night. According to Thomas Dekkar "Sleep in the golden chain that ties health and our bodies together". It is therefore essential that we should try to acquire good health. Acquisition of good health calls for certain concrete steps. According to many doctors and specialties, three basic factors bring about good health. They are

a) Clean environment
b) Good habits &
c) Clean mind

One of the basic requirements for good health is to live in a clean and healthy environment. Unfortunately, this is becoming almost impossible today. Our entire environment is polluted. Even the water that we drink is polluted. On the other hand the food that we consume is contaminated. The air that we breath is full of dirt and poisonous elements. Our cities, towns and rivers have become dumping grounds of waste and breeding grounds of dangerous microbes. Unless and until this pollution is prevented our chances of acquiring good health may remain a distant dream.

Secondly, good personal habits go a long way in helping to acquire good health. Good habits such as getting up early, maintaining personal cleanliness, temperance in eating, doing physical exercises, adequate sleep and rest etc, vital elements which help in the acquisition of good health.

Thirdly, the importance of clean mind for the acquisition of good health cannot be undermined. Mind, to a great extent, controls the body. Many doctors say that if the mind is so powerful that it can dispel even the most incurable ailments of the body.

Definitions of Health:

According to WHO, "health is a state of complete physical mental and social well-being and not merely the absence of disease or infirmity"

According to J.F.William," Health is the quality of life that enables the individual to live most and serve best"

Tolcott Parsons (1971) suggested that health can be defined as "The state of optimum capacity of an individual for the effective performance of the roles and tasks for which he has been socialise".

Factors Affecting Health:

It is a fact, of experience that students are interested in themselves, as well as in their own lives in their families, and in their communities. It is apparent that they are not interested in "health for health's sake". This is only natural and normal. The important fact is that students want to gratify such basic needs as to belong, to be recognized, to be in good standing, to be loved, to eat well, and to play joyously.

These are all aspects of good health and fine living. Improvement can be made in the essential factors producing health if there is (1) understanding (2) desire, and (3) action. Improvement in living then can be made to increase satisfaction from one's work and provide enjoyment, efficiency and happiness. However, the students should also be aware of the factors that affect their health.

The six major factors that affect a person's health are heredity, environment, social habits, nutrition, professional health service and freedom disease and accidents.

i) Heredity:

Life begins when the sperm cell of the father unites and fertilizes the ovum or female cell of the mother. The colour of eyes, hair and skin, the shape of the nose, one's stature and general body from etc, are inherited through the reproductive cells of the parents.

ii) Environment:

The world we live in consists of (i) factors and conditions such as soil, forests, rivers, plants, animals, insects, bacterial life, houses, cultivated fields, wells, ponds, electrical units, trains, cars wagons, newspapers, books, and countless other things, and (ii) people and their behaviour as expressed by custom, habit, tradition, prejudice, superstition and institutions. We are healthy, sick or disabled depending on our physical environment and on our health habits. Therefore, the combined efforts of the individual, community, government and the system of education are necessary to create a safe physical environment where individuals can work and live a healthy and happy life.

iii) Social Habits:

Our habits of eating, cleanliness, clothing, home treatment of illness and most of the thinking about health are the direct outcome of the influence of parents, teachers, members of the family and friends. Many people believe that sickness is caused by the evil eye or that sickness is a curse that must be endured. People can be taught scientific truths about the cause and prevention of sickness.

iv) Proper Nutrition:

Eating a balanced diet is an essential life activity. Because of the absolute necessity of nutrition to life and health, it is considered here as a separate health-producing factor. A balanced diet provides the cells of the body the essential nutrients for three main purposes: (i) for growth and repair; (ii) for regulation of body processes and (iii) to yield energy. The right kinds of foods- milk, eggs, vegetables, fruits, meat or fish, cereal, and whole-grain or enriched bread in proper balance provide the nutritional needs of the body and markedly affect the quality of life. Also proper foods aid in regular elimination of body wastes.

v) Professional Health Services:

This essential factor contributing to effective living consists of adequate medical and dental care and health education. Health services range from preventive to curative measures including health guidance, periodic health examination, recording of health histories, and clinical surgical and hospital care. Health education should enable one to (i) understand the role of professional services in effective living, (ii) select competent health advisers, (iii) discover hoe to secure continuous medical supervision and care and (iv) determine ways and means to pay for professional services.

vi) Freedom from Disease and Accident:

This vital factor for health is considered no larger as total health but as merely an aspect of health. Modern control of communicable disease is one of man's great achievements and has done much too increase effective living and longevity. Several disease like pneumonia, tuberculosis, influenza and the venereal diseases, still remain to be completely eliminated and there is much yet to be accomplished inn disease, heart disease, cancer and etc. are still unconquered.

Accidents in the home, on the highways and in industry constitute one of today's major problems. Learning to live effectively, yet safely is a different art in present –day society.

There is great opportunity for improvement, personally and in the community with respect to this vital health factor, freedom from disease and accidents through better health education.

Qualities of a Healthy Person:

A healthy person has the following qualities.

- Absence of physical and mental disease.
- A very busy active and disciplined life, having full control on his time.
- Normal and balanced weight. A healthy person should be neither very thin nor fat.
- A healthy person takes a balanced diet, rich in all vitamins particularly of the B and D families. Calcium is also be taken in good quantity.
- A healthy person is free from tension of any sort.

- A healthy person enjoys to live. For him living is a pleasure, not a burden.
- A healthy person always feels young because age is not so much a physiological concern as psychological one.
- A healthy person has strong digestive juices, a normal heart beat, proper elimination and happy disposition.
- A healthy person has a strong constitution.
- The motto of healthy man is ‘look younger and live longer’
- A healthy person maintains a cheerful and positive attitude.
- A healthy person has sound sleep. Sound sleep indicates sound health. Sound sleep is refreshing and health giving.

Aims and Objectives of Health Education in Schools:

The function of education is to prepare us for complete living. Complete living involves the right ruling of conduct in all directions under all circumstances. In what way to treat the body; in what way to treat the mind; in what ways to manage our affairs: in what way to bring up a family: in what way to behave as a citizen; in what way to utilize all those sources of happiness which nature supplies how to use all our faculties to the greatest advantages of ourselves and others and how to live completely. And this being the great thing useful for us to learn is by consequence, the great thing education has to teach. It is health education that teachers a student how to treat the body and mind.

Another objective of the health education is to provide in formations that deals specifically and explicitly with the information, attitudes and habits the students needs to maintain and improve his own health and that of his community. An important

phase of instruction to this end will be emphasis on the fact that health is more than a personal problem, that it has social implications, and that the individual owes it to society no less than to himself to keep his health energy at their peak.

The prescribed course of health education should be an integral part of the total heath programme of school education. Each school should have a planned and direct health instruction for the students. Needs and interests of the students should be taken into consideration. Thus the school health education programme can help the students for effective living.

Objectives of Health Education at Different Stages of School Education:

So far we discussed some of the important aims and objectives of health education in general. Let us now discuss the specific aims and objectives of health education at different stages.

I. Primary Stage:

a) To make pupils realize the value and its personal and social importance

b) To include healthy habits of living regarding personal hygiene, food, clothing and posture.

II. Secondary Stage:

a) To help students know how they can save themselves from accidents and from the carriers of diseases, like flies, mosquitoes, rats, dirt, discharge as well as polluted air, water and food.

b) To help students understand the relationship between health education and physical education.

c) To make pupils realise the value of health and its personal and social importance.

d) To inculcate habits of healthy living regarding personal hygiene food, clothing and posture.

III. Higher Secondary Stage:

a) To give students sufficient knowledge and training in First Aid.

b) To emphasise on students the bad effects of smoking and drinking alcohol.

c) To make pupil understand the importance the causes of the pollution of air, water, soil and food as well as the ways and means of their prevention.

d) To help students understand the importance of physical training sports, games, yogic exercises as well as their relationship with health education programme.

e) To give students desirable knowledge about marriage, sex and pollution explosion.

Responsibilities of the School:

School health education programme can be thought of as a process by which the pupils learn to promote and protect their own health and that of thee community in which they live. We know education encompasses many forms and takes place in many different situations. It may be assumed that the competencies and skills associated with health education also will gained in many ways. We find, however,

that the actual teaching of health education, in a formal, structures manner, reposes within the confines of the institution or the school. School health education must be education for reasons other than the fact that it is offered in the school curriculum. It must contain within its offerings experiences which are directed towards the same end as that of thee school. This end according to the Educational Policies Commission, proposes that a student become conversant with the skills, knowledge, and standards of his society, and learns how it is possible to contribute to that society.

This purpose of the school imposes a considerable responsibility on health education. When one learns the skills, knowledge and standards of his society his behaviour is modified or strengthened. His behaviour is modified relative to the standards of his society. This is an inescapable obligation of health education if it is to be considered a function of formal education.

We must face the fact that we are physical beings, and that our intellectual ability and our intellectual performance are based totally on our good health, vigour, and vitality. Dr. David Henry, President of the University of Illinois, has said:

"The premise that physical vitality promotes intellectual vitality and contributes to academic performance as well as emotional stability is one that every school should embrace and implement. The nation that physical well-being will take care of itself among young people or that intellectual vitality is something apart from good health can no longer be tolerated as an institutional attitude in view of the overwhelming scientific evidence on the subject"

Need and significance of the study:

In a modern society everybody needs to know and follow the rules of healthy living in order to keep well. It is necessary for the individual as a member of the community. Health has a preventive side and remedial side. The preventive side is more important than the remedial side.

In earlier days life was very simple. People worked hard, walked everywhere, ate more home food, did house hold chores and enjoyed a healthy balance in life. Now we have cars and bikes to go around in, exciting varieties of fast food to eat, home appliance to reduce our chores and save time. But the time that has been saved in this manner is now being spent of the workplace.

Nowadays, people have don't time to exercise which is very essential for good health. Because of this lack of exercise, obesity, diabetes, heart attacks, strokes hypertension etc are on the rise even among the young. This has alarming implications for the nation as whole. If our young people are going to die or fall seriously sick in the most productive years of their life, the country's future looks very bleak indeed.

Health is a state of complete physical, social and mental well being and not merely the absence of disease or infirmity. Health is thus a level of functional efficiency of living beings and a general condition of a person's mind, body and spirit, meaning it is free from illness, injury and pain. It is a resource of everybody life and a positive concept emphasizing physical capabilities.

Good health is a secret of every happy man. There is an old saying "Health is wealth". For children staying healthy is vital for proper growth and development of

mind and body us, they need to focus in the class and fully participate in the activities on the field. Parents must take their children for medical check-up and learnt from experts about their development in terms of height and weight, as it has a huge impact in their overall performance and efficiency.

Health is freedom from disease and sickness. Without health, we cannot do any work and we cannot improve our life. So, health is the primary need for every one of us. To keep our health well, we should obey the laws of hygiene. Food, exercise, rest and sleep, regular habits, neatness and cleanliness, air and light, punctuality and peace of mind are the primary conditions for good health. Hence we should eat healthy food and balanced diet. Every day we should take exercise in morning and evening. We should be regular in all our daily activities. We should be neat and clean. We should let fresh air and light into our houses. We should be punctual in all our duties. Peace of mind is another condition for good health. So, we should not worry over small things of life.

Nowadays all the young people are addicted to the modern life style. They have no time to spent to maintain their health properly. As the proverb says “prevention is better than cure” health awareness should be initiated from childhood. This would really create a positive influence on their daily lifestyle. So when they grownup into adults there is less probability for them to get diverted into the wrong path. Now the young people don’t have the awareness related to their health. We know that “younger generation is the pillar of future India”. The awareness of health inn younger generations reveals the vision of future India. So the investigator has undertaken this study to find out the health awareness of higher secondary students.

Statement of the problem

The problem selected for the present study is entitled as **"HEALTH AWARENESS AMONG HIGHER SECONDARY STUDENTS IN KANYAKUMARI DISTRICT".**

Operational definitions of the terms:

The key terms used in the title are defined below

HEALTH AWARENESS:

Awareness is the state of being aware, conscious of a situation or object, without direct attention to it or definite knowledge of its nature.

- Carter V. Good (1945)

Health awareness is the knowledge of the present and future consequences of behaviors and lifestyles and the risks they may present on our health.

HIGHER SECONDARY STUDENTS:

The students who are studying in 11^{th} and 12^{th} standard.

Objectives of the study

The following objectives were formulated for the present study.

2. To construct and validate a Health Awareness Test.

3. To find out whether there is any significant difference in the mean scores of health awareness of higher secondary students with respect to the background variables such as:
    - Gender
    - Locality
    - Community
    - Religion
    - Type of Management
    - Educational qualification of Parents

Hypotheses:

The following hypotheses are framed for the present study.

1. There exists no significant difference in the mean scores of health awareness of boys and girls.
2. There exists no significant difference in the mean scores of health awareness of urban and rural students.
3. There exists no significant difference in the mean scores of health awareness of higher secondary students with respect to the various communities.
4. There exists no significant difference in the mean scores of health awareness of higher secondary students with respect to the various religions.
5. There exists no significant difference in the mean scores of health awareness of higher secondary students with respect to the various type of management.
6. There exists no significant difference in the mean scores of health awareness of higher secondary students with respect to the educational qualification of father.

7. There exists no significant difference in the mean scores of health awareness of higher secondary students with respect to the educational qualification of mother.

Procedure of the Study:

For the present study the investigator adopted normative survey method. The sample consisted of 400 higher secondary students studying in different schools of Kanyakumari district. The tools used for the collection of data were Health Awareness Test prepared and validated by the investigator and personal data sheet. The data collected were analyzed to throw light on the factors enumerated in the objectives of the study. Mean, Standard Deviation, t-test and ANOVA were used in the analysis of data.

Limitations of the study:

- The investigator has taken only 400 students of standard XI as sample for the present study. The study would be more relevant, if the students of standard XII are included.
- The study is restricted to the schools in Kanyakumari district only.

Organization of the report:

This work is presented in five chapters.

Chapter: I - Deals with the introduction, Need and significance of the study, statement of the problem, Operational definition of the terms, Objectives of the study, Hypotheses, methodology in brief and Limitations of the study.

Chapter: II - Deals with review of related literature.

Chapter III - Deals with methodology the present investigation. This chapter consists of the method adopted, tool used, sample and administration of the tool.

Chapter IV - Deals with analysis and interpretation of the collected data.

Chapter V - Deals with summary, findings, conclusion and suggestions for the future study.

CHAPTER:II

REVIEW OF RELATED LITERATURE

The review of related literature is an essential part of investigation. It allows the researcher the acquaint himself with current knowledge in the field or area in which she is going to conduct her research.

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 and it critical aspect and ensures the avoidance of unnecessary duplication”. According to Lokosh 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 interpretations 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.

Importance of the Review of Related Literature:

- It enables the researcher to define the limits of his field. It helps to delimit and defines his problem.
- Review of related literature gives the scholars and understanding of previous work that has been done.
- It gives an understanding of the research methodology which refers to the way it is to be conducted.
- It provides the means of getting to the frontiers in the particular field of knowledge.

Thus related literature plays a crucial role in any kind of research. An attempt has been made in the present chapter to review the available literature related to the topic. The studies reviewed are given below.

Indian studies:

Bhasin (2013) studied the impact of awareness through community health volunteer approach on prevention of HIV/AIDS among migrants in Ludhiana City. The major objective was to study the impact of local community health volunteers approach on the knowledge, attitudes and practices regarding HIV/AIDS among migrants in Ludhiana Industries. This study is based on Ludhiana City known as Manchester of India, a district of Punjab, India. Ludhiana city is a hub of thousands of textile and steel Industries and having a 7-8 lakhs of migratory population working in different industries. A sample of 1500 respondents (unskilled and semi-skilled workers) was drawn through stratified random sampling techniques during Pre and Post AIDS Preventive education intervention from the 100 different large scale industries selected by simple stratified random sampling procedure having more than 50 industrial workers in age group of 15-45. A well designed health education program using personal communication and visual media through community health volunteers was conducted for industrial workers by covering more than 100 industries. Knowledge regarding HIV/AIDS and its prevalence , two or more correct modes of transmission and identifying correct method of diagnosing HIV infection increased from 17 to 73 percent , 10 to 52 percent and 10 to 71 % respectively. Around 67 % of the respondents as compared to only 17 percent of the industrial workers are of the viewed that HIV infected persons should be allowed to work in the industry, Work pressure or mental stress are the main cause of drug addiction among migrants. Knowledge regarding multiple sex relations as unsafe sex behaviour increased from 10 % to 80 %. Sexual encounter with CSW decrease from 23 to 10 %. Use of condom increase from 12 to 70%. From the analysis of data it is

established that after health education services industrial workers underwent blood testing for the detection of HIV infection in the different hospitals HIV positive cases in the floating population of migrant workers in the city of Ludhiana is 1.6 percent and the incident rate of HIV/AIDS is 2.05 percent . There is significant increase in knowledge, attitude and practices among migrants in relation to Prevention of HIV/AIDS among migrants.

Sunila et.al (2012-2013) conducted a study on oral health care awareness among nursing students in an Indian school. The aim of this study was to determine the impact of a course on oral health care awareness among third-year undergraduate nursing students. This experimental study included all the students from the third year nursing undergraduate course (n=42) during the academic year 2102-13. The intervention for the study included lectures, videos & live demonstrations on models and patients for oral health care. The effectiveness of the 3hr course was ascertained with a pretest and posttest 30-item questionnaire. The groups did differ significantly at the post-test, yielding highly significant results ($p<0.001$) indicating the improvement in the students' competency in oral health knowledge and skills after implementation of a course on oral health care. Oral Health Care Awareness amongst Nursing Students has a strong impact on improving the students' competency in oral health knowledge and skills. Introducing the teaching and training of the essential components of oral health care in a nursing school is a prerequisite for good practice.

Sharda et.al (2011) conducted a study on oral health awareness and attitude among 12-13 year old school in Udaipur. The aim of the study was to assess the Oral Health Awareness and Attitude among 12 – 13 year old school children in Udaipur City, India. In a cross-sectional study, a total of 514 children of 12-13 year old (306(59.5%) Boys and 208 (40.5%) Girls) were surveyed using a self – administered,

structured questionnaire written in English and presented through a pilot survey to assess the oral health awareness and attitude. Descriptive statistics using frequency distribution, mean percentage scores and standard deviation were calculated. The student's t-test was used to assess the differences in mean scores by age and gender and chi-squared test used as a test of significance for the proportions. The mean percentage knowledge and Attitude scores were 46.826 ±14.361 and 81.08 ± 23.063 respectively for all the children. There was no statistically significant difference for the mean percentage knowledge and attitude scores by age and gender.

Bobhate and Shrivastava (2011) made a study of Knowledge and Practices about Reproductive Health among Female Adolescents in an Urban Slum of Mumbai. The aim of the study was to determine the knowledge and practices about reproductive health among female adolescents. Cross sectional descriptive study was undertaken in an urban slum area of Mumbai for period of 3 months. All adolescent girls from 10 p- 19 years of age, who had attained menarche, attending general OPD and STI clinic, were included. Subjects were interviewed face to face using pretested semi- structured questionnaire after obtaining informed consent. The questionnaire contained information regarding socio demographic parameters and that related to reproductive health i.e. menstrual hygiene, knowledge and practices related to HIV/AIDS, contraception, abortion, Medical Termination of pregnancy (MTP), etc. and their treatment seeking behavior in last 3 months for reproductive health problems. 79 subjects had unsatisfactory menstrual hygienic practices. 212 women were about availability of ANC services. 66 percent of women had correct knowledge of modes of transmission of HIV while only 18.7% knew about safe sexual practices. Education status and early adolescents age group (10 – 14 years) was found to be significantly associated with knowledge of adolescents regarding menstruation.

Konwar (2011) studied health condition and health awareness among the tea garden laborers: a case study of a tea garden in Tinsukia District of Assam. The Assam Human Development Report of 2003, acknowledged the fact that the health status of its tea garden laborers is much below the state average; the state itself is languishing at the bottom. The present study is an attempt to explore the health condition of the tea industry laborers, especially laborers of the Beesakopie tea garden, a garden in Tinsukia District of Assam. The study reveals that a significant percentage (23%) of labor families suffer from calorie deficiency of more than 1,200 calories. Further, it is also observed that there is a huge gap between the per capita requirement and intake of both protein and carbohydrate among the laborers and their families. Therefore, it was observed that the laborers are suffering from various disorders like fever, cough, anemia, hypertension, gastric problems, skin problems, etc. Moreover, the data reflect that a considerable percentage of members of labor families died during the last five years due to tuberculosis, high blood pressure, lack of proper treatment and so on. Child mortality is also observed whose reasons are not known to the laborers, indicating the lack of awareness among the laborers. Further, the laborers do not show any interest to go to hospital for treatment. The laborers are ignorant or are not conscious about personal hygiene and sanitation practices. Moreover, only 1% of labor families use filter to purify water. Therefore, health awareness among the tea industry laborers is very poor. Thus, the government as well as the authority of the tea industry should consider this serious issue as an integral part of the developmental plan, for equitable and sustainable economic growth of the country.

Mehta and Kaur (2010) conducted a study on oral health-related knowledge, attitude, and practices among 12-year-old school children studying in rural areas of Panchkula, India. This study was conducted to assess oral health-related knowledge, attitude, and practices among 12-year-old school children studying in rural areas of Panchkula, India. A total of 440 children (216 males and 224females) from 12 schools were included in this study. All the participants were requested to complete a 113-question closed-ended questionnaire. The statistical significance of any difference between the two genders was determined using the Chi-square test. Only 25% of the participants said that they cleaned their teeth more than once in a day. Thirty – two percent did not clean their teeth daily. Over the preceding 1 year, 45.5% of the children had some problem with their teeth and/or gums, but only 35.9% visited the dentist. Among these children, 8.2% used tobacco in some form. Oral health-related knowledge of girls was significantly better than that of boys.

Patil (2010) conducted a study on awareness of oral health among medical practitioners in Sangamner city. The present study was undertaken to assess knowledge, attitude and practice of dental awareness among medical practitioners in Sangamner city, Maharashtra, India. The present study is Cross-sectional survey conducted among the medical practitioner in Sangamner city, Ahmednagar district, Maharashtra, India. 100 medical practitioners from 4 different zones (25 from each zone) were randomly selected for the present study. The data pertaining to their knowledge, attitude and practice about oral health was gathered using a self administered questionnaire. The data was analyzed using descriptive statistics. Majority of the medical practitioners were not aware that, Caries is infectious and

transmissible from mother to child, OSMF as a precancerous and had inadequate knowledge about oral health's relation with other parts of body.

Pratibha and Sharma (2010) made a study to examine awareness of reproductive health among the kurmi adolescent girls of Raipur city. To know the extent of awareness of reproductive health among Kurmi adolescent girls aged 16-19years from Raipur City, Chhattisgarh. A School based Study was conducted in various schools of Raipur city through predesigned multiple choice questionnaires. The study revealed that majority of the girls scored well in the knowledge of safe sexual relation, right age of child bearing, mode of pregnancy preventions. The areas where girls scored low were meaning of Reproductive health, prior knowledge of menstruation, fertile period, contraception, symptoms and transmission of AIDS, RTIs and knowledge of STDs other than AIDs/HIV was poor. Attitude towards Sex education were positive and pre marital sexual relation were disagreed by majority of the girls. To conclude poor knowledge in girls about Reproductive Health was a serious concern as found in the present study. Therefore Health education should be incorporated in the curriculum which should be given through teaching, interpersonal communication, television, health camps and specialist.

Suma (2010) studied dental health awareness, attitude, oral health-related habits, and behaviors in relation to socio-economic factors among the municipal employees of Mysore city. The major Objective was to assess the dental health awareness, attitude, oral health-related habits, and behaviors in relation to socioeconomic factors among the municipal employees of Mysore city. This study was cross-sectional in nature and involved completion of a predesigned structured questionnaire. The questionnaire included multiple option questions to collect information on awareness on dental diseases, visit to dentist, reasons for visit, reasons

for not visiting dentist on routine basis, oral hygiene practices, and deleterious oral habits. Modified Kuppuswamy scale with readjustment of per capita income was used to classify individuals into different socioeconomic status (SES) categories. Data were entered onto a personal computer and analysis was done using SPSS version 14. Awareness on dental diseases was 100% in upper SES and nil (0%) in the lower SES. Visit to dentist in the last 1 year was 100% in the upper SES and 32.3% in the lower SES. The prevalence of smoking, pan-chewing, and alcohol consumption was high in lower SES than in upper SES. Oral hygiene practices were better among the subjects in upper class than the lower ones. A direct relation was noted between the favorable dental health awareness, attitude, oral hygiene behavior, and SES.

Biswas et.al (2009) made a study to examine on awareness about eye health care and eye donation among secondary level students. The aim of the study to assess the awareness of eye health care and eye donation among secondary students of North Kolkata, India. It was a cross – sectional study. A total of 1525 student of standard VIII,IX and X of Government aided schools of North Kolkata participated in this study. A pre-tested, semi- structured questionnaire was administrated on eye health care eye donation. 1284 (84.2%) participants opined that awareness on eye health care can prevent most of the blindness and 1206 (79.1%) students knew that Vitamin A has important role in prevention of childhood blindness. Majority, 1235 (81.0%) students were aware of eye donation after death while only 489 (32.1%) participants knew that the ideal time for eye donation is within 6 hours of death. 802 (52.6%) participants mentioned printed and electronic media (like newspaper and television)as the major source of information on eye donation.

Patil (2008) made a study to examine the awareness of oral health among medical practitioners in Sangamner city. The present study was undertaken to assess

knowledge, attitude and practice of dental awareness among medical practitioners in Sangamner city, Maharashtra, India. The present study is cross- sectional survey conducted among the medical practitioner in Sangamner city, Ahmednegar district, Maharashtra, India. 100 medical practitioners from 4 different zones (25 from each zone) were randomly selected for this study. The data pertaining to their knowledge, attitude and practice about oral health was gathered using a self administered questionnaire. The data was analyzed using descriptive statistics. Majority of the medical practitioners were not aware that, caries is infectious and transmissible from mother to child, OSMF as a precancerous and had inadequate knowledge about oral health's relation with other parts of body.

Shyamal (2008) made a study on health awareness among the urban and rural secondary school students. The study investigated the influence of school location on the level of awareness of secondary students about health. The study was conducted in the year 2008 at Purulia district in West Bengal. Two hundred forty nine (249) students were randomly selected from ten secondary schools of urban and rural area. The Instrument utilized for this study was questionnaire namely "Health Awareness Measure Scale" (HAMS). Data was analyzed using inferential statistics. Five hypotheses were formulated and tested at 0.01 and 0.05 levels significance. Result showed that secondary school students in urban and rural areas are aware about health, but students in urban areas have more aware about health than their counterparts in rural areas. Result also showed that there were significant differences between urban and rural girls students in respect of their health awareness whereas urban and rural boys do not have significant differences. In conclusion, there were specific area differences between urban and rural girls student's in health awareness.

Sharma and Nagar (2008) made a study to examine the health awareness of rural adolescents' girls. The study was undertaken to see the awareness of adolescent girls regarding health aspects through an intervention study. The study adopted a pretest – post test design with an intervention for a specific period. A total of 112 adolescent girls in the age group of 14 to 18 years were selected randomly from government schools of five villages in two blocks of Kangra district of Himachal Pradesh. The tools for assessment consisted of socio-economic status scale and a general awareness scale. The sample group was pretested on their level of general awareness which focused specifically on health aspects. An intervention package was developed on the aspects of health including general health, reproductive and child health, environmental health and nutritional aspects. The intervention was given for nine months to the girls though lectures, discussions and demonstrations. Post testing was done on the girls after the period of intervention. Results showed that the knowledge of girls regarding health aspects improved significantly after intervention. There was a considerable increase in the awareness levels of girls with regard to knowledge of health problems, environmental health, nutritional awareness and reproductive and child health. Thus informative and educable interventions seem to have a positive effect on awareness levels which would eventually encourage expansion of knowledge and positive health habits.

Das et.al (2006) conducted a study on adolescent male reproductive health: awareness and behavior among peri-urban and rural boys in West Bengal, India. Reproductive health is a serious concern not only for adults but also for male and female adolescents. The present study looks at the similarities and differences in reproductive health awareness and behavior among adolescents males living in peri-

urban and rural areas of the state of West Bengal, India. Questionnaire data was collected from 111school – age adolescent boys (55 peri-urban and 56 rural) between the ages of 15 and 18. Results show that the level of awareness about some aspects of reproductive health seems greater among peri-urban boys than their rural counterparts. However, in terms of reproductive health behaviors both groups appear similar.

Kotecha and Sangita (2006) conducted a study on reproductive health awareness among rural school going adolescents of Vadodara district. To identify the reproductive health issues associated with adolescence and their readiness to avail services like Adolescent Friendly Clinic (AFC) among rural school going children in Vadodara district. A quantitative survey was carried out using a self-administered structured questionnaire among 768 (428 boys and 340 girls) students from 15 schools by systematic random sampling from schools (3 schools from 5 talukas). Focus group discussions, 5 each with adolescent boys and girls and teachers were held. Only 31% of the boys and 33% of the girls mentioned that they had heard about contraception. More than half of the adolescent boys and girls knew correctly about various modes of transmission of HIV/AIDS. A large proportion of boys and girls have mentioned changes in the opposite sex such as increase in height, change in voice, breast development, and growth of facial hair, growth of hair in private parts, onset of menstruation in girls, etc. Nearly 70% of adolescents were ready to use AFC. Teachers perceived that adolescents become curious about the changes taking place in them, but they lack information and opportunities for open-discussions to get answers to their queries related to reproductive health. They are willing to take help from teachers but teachers are not equipped with knowledge nor are they comfortable discussing these issues with their students.

Sreedhar (2006) conducted a study on awareness of tobacco use risk among high school children in Hyderabad. The aim of the study was to determine the awareness of tobacco use risk among high school children. Cross sectional study. Two randomly selected schools from the list obtained from DEO. Study population: High school children Sample size: 197 school children. Statistical Analysis: Microsoft Excel 2007 and Epi- info 3.5.3. result : Knowledge on Ill effects of Tobacco use were lung cancer-35% , Oral cancer- 30% Oral disease – 25% and others – 10% . Knowledge on passive smoking was only 26%, and out of which 21% knew about Ill effects due to Passive smoking. Influence for the behavior being more by Peer Group & Friends 50%, followed by parents.

Shuha and Sharma (2005) conducted a study to compare the knowledge, attitude and practice regarding reproductive health among urban and rural girls. Study aims at assessing the knowledge, attitude and practice regarding reproductive health among 200 school girl in the age 15 -19 years from rural and urban settings of Jaipur. Simple random sampling was used. Three point scales to assess awareness level of reproductive health was designed. The result showed 40 percentage rural girls and 60% urban girls considered menstrual as natural phenomena while 39% of urban girls and 56% of rural girls took it as disease. 11 percent of urban and 28 percent of rural girls were not aware about the gap of periodic menstruation cycle. Differences were evident in the perception of urban and rural respondents regarding the right age of menarche. Menarche varied widely, within the population. 33 percent urban respondent had prior information regarding menstruation, 62 percent rural respondent were unaware of the right age of menarche. Majority girls had several taboos, regarding reproductive health**.**

Sonu et.al (2004) conducted a study to examine the health awareness of high school students. The present study was conducted to ascertain the awareness of high school students about management of common illnesses and injuries; estimate the prevalent wrong practices and beliefs about illness and injuries; and to assess their knowledge about basic reproductive and child health. The study was conducted during November and December 2004 in a purposefully selected Boys Senior Secondary School of field practice area of Department of Community Medicine, rural health training center, Naraingarh, Haryana. A self-administered structured questionnaire was designed as per the syllabus of high school and was then translated into local language to assess the knowledge of students about various illnesses, their prevention and management, viz., malaria, tuberculosis, leprosy, pneumonia, diarrhea and life style diseases like diabetes and hypertension. It also sought information on immunization, reproductive and child health, registration of birth and death, management of injuries, dog bite, snakebite, burns, high fever, worm infestation, epilepsy, dental caries, drowning and poisoning, etc. There were 68.5% correct responses (263 out of 380) regarding malaria, 41.5% had some knowledge about signs and duration of treatment of leprosy, 18.8% and 46.4% knew about the correct treatment of leprosy and tuberculosis respectively, 33.2% could correctly enumerate food- and water-borne diseases, 74.5% knew about their methods of control. Knowledge about hypertension and diabetes was present in 65.3% and 58.3% of the students respectively. Only 23.7% students knew about the correct number of antenatal checkups recommended to a pregnant woman. However, majority knew about medications advised during pregnancy (85.5%) and hygiene during delivery (81.9%). Only 34.2% students could correctly tell about the right time of birth and death registration. There was sufficient knowledge about newborn care (85.5%),

methods of oral rehydration solution (ORS) preparation (78.9%) and etiology of dental caries (85.5%), but knowledge about worm infestation (52.4%), immunization (54.6%), and pneumonia (40%) was lacking in majority of the students. Majority had adequate knowledge about management of injuries (80.9%), skin infections (93.4%) and drowning (78.9%). Only 42.8% and 27% students identified appropriate management of snakebite and dog bite respectively. Many wrong practices and beliefs were prevalent among students regarding various aspects of injuries and illnesses. Almost 90% students felt that penicillin was the treatment of choice for malaria; that tetanus injection is given during infancy; and that tourniquet should be tightened as firmly as one could in a case of snakebite. Majority (78.9%) of students felt that oral rehydration solution could be prepared by mixing one teaspoonful of ORS powder in one glass of water; that spice/ chilly should be applied for dog bite management (68.4%) and that shoe sniffing should be used for epileptic attack (65.8%).

Kate and Susmita(2000) conducted a study on male reproductive health: a village based study off camp attenders in rural India. The aim was to investigate men's willingness to participate in such camps, and to describe reproductive health problems in men. Structured interviews were carried out with 120 men attending a reproductive health check-up in a village in rural West Bengal, India. General information, details of family planning methods used and data on reproductive health complaints were collected. Clinical examinations were also carried out. Socio – demographic characteristics were compared for men with and without reproductive health and urinary complaints. Three quarters of the married men were using contraception, but the majority stated that their wives were responsible for it. The most common reproductive health complaint was urinary problems; 28% had burning on urination and 22% reported frequent and/ or difficult urination. There were few

social or demographic differences between men with and without problems. Seventeen percent of the men had clinically diagnosed reproductive health problems, the most common being urethral discharge. None of the men with diagnosed problems were using condoms. This study highlights the interest of men in their reproductive health, but also highlights the high proportion of men with problems. In addition, a number of men with clinically diagnosed problems had not reported them in the interviews, illustrating either the reticence to report or the lack of knowledge about symptoms of reproductive health problems. Recommendations for future programmers and research in this field are given.

Foreign studies

Cassies (2013) conducted a study on lack of healthy awareness among students. This study was carried out to investigate lack of healthy lifestyle awareness among IIUM students. A total of 13 male and 20 female among undergraduate students of IIUM Kuantan and Gombak campus were selected randomly to be the respondents of the study. A set of questionnaire was designed to gain primary data from the respondents about their awareness and knowledge of healthy lifestyle. Generally, the findings of the study suggest that most of the students should practice a healthy lifestyle and they should be aware about the effects of neglecting healthy lifestyle in order to maintain their health. From this research, it has been proven that if the students practicing a healthy lifestyle, they could feel the positive effects towards their health and also their study.

Lindenmeyer (2013) studied oral health awareness and care preferences in patients with diabetes: a qualitative study. People with type 2 diabetes have an increased risk of oral health problems; however, oral health is currently not included in structured diabetes reviews and education in the UK. The major Objectives were this study explores the patient experience related to oral health and diabetes, especially in relation to: (i) Awareness of the link between oral health and diabetes and oral self care needs.(ii) Interaction with health professionals in dental and general practice.(iii)Preferences for receiving oral health information and education. This nested qualitative study involved semi-structured telephone interviews with a purposive sample of 20 participants from a questionnaire study on oral health awareness in patients with diabetes. Interview transcripts were analyses using a thematic framework approach. Participants were mostly unaware of the link between oral health and diabetes. Those that had been made aware by a health professional were not given concrete self care advice. Interactions with dental professionals were often limited to informing the dental practice of their diagnosis and current medication. Most participants were in favor of dentists screening for diabetes, but as their general practice was the hub for diabetes care, they felt GPs or nurses should provide oral health information and discuss oral health with patients. Written information regarding diabetes and its possible effects on oral health needs to be more readily available to people with diabetes, especially at diagnosis. There may be a place for introducing a structured oral health question in routine diabetes reviews.

Mamdouh (2012-2013) made a study to examine the health awareness among university students in Jordan. The primary purpose of the study was to determine the level of health awareness among university students in Jordan. The sample of the

study consisted of (860) male and female students from different colleges at the Hashemite University during the second semester of the academic year 2012/2013, who were exposed to the health awareness scale. To analyze the gathered data, means, standard deviations, t-test and one-way ANOVA were calculated. Additionally, results indicated that the degree of health awareness for the Hashemite University students was low, and that there were statistically significant differences for the level of health awareness for the Hashemite University students ascribed to the variables of gender, specialization, and academic level and GPA.

Afzal (2012) made a study to find out health awareness patterns between the two communities (Muslim and Horizon). The purpose of the study was to examine and compare how health awareness knowledge influences on health outcomes between Muslim and Horizon communities. In this study, total number of 275 (150 for Muslim and 125 for Horizon) participants were interviewed by the author during April to July, 2012 in the Rajshahi Metropolitan City of Bangladesh. The simple random sampling technique was applied when sample size selected. Various statistical techniques were used during analyzed data with SPSS software in version 15. The present study showed that health awareness knowledge was greatly influence over the healthcare outcomes. The author found that Muslim community dominated the minor community (Horizon) in the various sphere of life. Most of the participants studied up to primary level which was 45.09%. 83.46% participants seemed that proper health awareness knowledge positively enhanced to get healthy life style. 49.10% participants seemed that communal destitution is existed to get educational attainment and take healthcare facilities. 87.28% participants argued that they were concern either permanent or temporary family planning methods. 79.35% participants showed their opinion that health awareness knowledge made conscious about primary

diseases, how and where to take diagnosis and treatment of their suffering diseases. 83.23% participants expressed their fillings that health awareness and educational knowledge enhances to get better healthcare facilities and lead a better healthier life.

Csaba (2011) conducted a study on health awareness, motor performance and physical activity of female university students. The aim of the study was to assess body composition, health awareness and cardio respiratory fitness in female university students differing in volume of obligatory physical activity classes. 109 female students of the University of West Hungary volunteered to participate in the study. The subjects were divided into two groups according to frequency and volume of obligatory physical activity: students of recreation and health education programmes (RHE; n = 27) and of social pedagogy, tourism and catering, and teacher training programmes (STT; n = 82). Basic somatic characteristics were measured, body composition was assessed by bioelectrical impedance, cardio respiratory fitness was evaluated using the Rockport Fitness Walking Test and health behaviour was assessed by questionnaire method. Student's t-test for independent samples, the U Mann Whitney test or chi-square tests were used in data analysis. RHE students had higher values of percentage muscle mass ($p<0.05$) and of cardio respiratory performance ($p<0.001$), they also declared significantly more frequently ($p<0.001$) practicing leisure physical activity as compared with the STT group. However, in both groups the symptoms of unhealthy behaviour were observed. Although beneficial effects of augmented physical activity on body composition, cardio respiratory performance and attitudes towards taking up leisure-time activity was noted, attention should be paid to symptoms of unhealthy behaviour observed in female students. This support the need for including obligatory physical education classes in university

curriculum and the importance of education and promotion of healthy behaviour among the students.

Christine (2010) studied raising oral health awareness among nephrology nurses. The complexity of care for patients with chronic kidney disease (CKD) reinforces the need for collaboration between health care providers. The purpose of this study was to raise oral health awareness by providing educational seminars to health care providers, specifically nephrology nurses. Educational seminars entitled "Oral Health and Chronic Kidney Disease" were delivered by calibrated dental hygiene educators to nurses in 3 different regions in the United States. The nurses participants (n=60) were given randomly assigned pre- and post- tests, assessing their knowledge of oral health and its relation to CKD. Pre – tests revealed that nurses had little knowledge of oral health and its relation to CKD. Regardless of questionnaire order, a significant increase of knowledge was observed for both groups (p-value $\leq$ 0.015), increasing from 61 to 76% on average. Incorporating interdisciplinary education increases nurses' knowledge and may lead to greater quality of life outcomes and improved overall health in patients with CKD.

Magdalena(2010) conducted a study on health education and health awareness in the prevention of cervical cancer. To determine whether pedagogy and sociology female students represent the appropriate attitude concerning the prevention of cervical cancer, so that they could become role models for other women and act in the future as health educators. The study was conducted from May to June 2010. The sample consisted of 284 female students of pedagogy and sociology (in both cases, the 5-year two-cycle studies) from two universities in Szczecin. All study participants took part in lectures on the sociology of health, preventative health care and diseases of the twenty-first century civilization, carried out in the academic year 2009-2010.

The lectures' program included, among others, selected topics in the field of cervical cancer prevention. The respondents filled in an anonymous self-reflexive questionnaire consisting of 16 questions, investigating their opinions and attitudes regarding cervical cancer prevention. The attitude of the students regarding cervical cancer prevention is not exemplary. According to the respondents, the availability of information concerning the prophylactics program is limited. The basis sources of information about the program are personal invitations for smear tests. A high percentage of respondents, who fear gynecological examination, are very worrying. Since the fear of the smear test itself is not high, it seems that factors related to a gynecological study can be one of the main reasons of the low consultation rate at free screening. Most respondents would like free smear tests to be obligatory and included in the list of periodic employee health examinations. However, it is clear that respondents do not want to take the responsibility for doing these tests regularly.

Muhammad et.al (2010) studied on oral health awareness, behavior and attitude of Pakistani population towards dental treatment. This study was to assess the awareness, attitude and behavior of Pakistani population in relation to oral health status and accept dental treatment among Darul Sehat Hospital patients living in Karachi, Pakistan. A cross sectional study conducted from July2010 to December 2010 involving 7686 adult volunteers attending Out Patient Department (OPD) in dental block at Darul Sehet Hospital. A total of 8125 subjects consulted in the out patients department and 76886 (94.5%) fulfilled the inclusion criteria and participated in the study. To access the oral health knowledge, attitude and behaviour we analysed the reasons of attending OPD, work load in different department, patients accepting or refusing the treatment plan or going for the alternative treatment pan. Results have shown that most of the patients came at dental OPD in pain without swelling

(N=3,620) (X^2=225.6, df =11 $p<0.001$) but they did not prefer the conservative approach (Root Canal treatment). Most of the patient preferred extractions (N=1,091) (X^2=43334.71, df=12, $p<0.001$) which indicates the lack of knowledge or may be cost effectiveness. It emerges that oral health related awareness, attitude and behavior of Pakistani population are need of improvement.

Ahmad (2009) studied awareness of organ transplantation among health care professionals and medical students. The objective of this study was to find out the awareness level on organ transplantation amongst the teachers, doctors and nurses working in these medical college hospitals and 1st to 5th year students. This cross sectional study was conducted in different medical college hospitals of Dhaka city during the months of Jan-March 2009. A structured questionnaire was given to the respondents. The total number of respondents was 462 of which 103 (22.3%) were doctors, 268 (58%) were medical students and 91 (19.7%) were nurses. Among the study group 31.4% knew that there was an organ transplantation law in Bangladesh and 16.5% said that there was no such law whereas 52.2% had no idea whatsoever about the law. Of the respondents 33.8% were willing to donate their organs after death, 41.6% did not want to donate and 24.2% were not sure. This study revealed that there was a lack of understanding regarding the religious views on organ transplantation. Only 37.1% of respondents thought that were was no religious objection to organ transplantation whereas 27.1% felt that there was religious objection while 35.7% were not sure. The study shows that there is significant lack of awareness regarding organ transplantation issues among the health care professionals and medical students in Bangladesh. The dictates of religion on this matter were also not clear to most of the respondents.

Mahantesh and Kishan (2009) made a study to examine the oral health attitude and awareness among school children. The aim of to assess the attitude and awareness regarding oral health among school children in Belgaum of age 9 to 14 years. The objectives of this study are to find out the oral health attitude and awareness among school children, collect the data regarding the same and analyzing the findings based on the data. This cross sectional study comprises of randomly selected three schools namely Maheshwariblind school government deaf and dumb school and Phoenix English medium, Belgaum. Study sample size is of 400 subjects of age group 9-14 years. Data collected was by means of a questionnaire having 13 questions. 77% of the normal school children brushed once a day in the morning and only 23% of them brushed twice a day in the morning and before going to the bed , whereas 72% of the physically challenged children brushed once daily in the morning and 28% of them brushed twice daily in the morning and before going to bed. The results obtained here indicated that parent education must be included in any national program that promotes premature oral health.

Nadeem et.al (2008-2009) conducted a study on to determinants of female health awareness in Pakistan .Health awareness is one of the important issues of third world countries like Pakistan. The most important indicator of societal and economic development of a country is the health of mother and her kid as it reflects the education level and availability of health services. This study tried to explore the impact of literacy rate and economic conditions on female health awareness in Pakistan. The data encompassed the variables Pre-Natal Consultation, Literacy rate, Sanitation, and Availability of Health Facilities collected from 110 districts of Pakistan in 2008-09. OLS method was used to explore the impacts of Literacy rate,

Sanitation and Facilities on female health awareness in Pakistan. The study found a positive impact of Literacy rate, Sanitation, and Facilities on Pre-Natal Consultation (female Health awareness in Pakistan).

Gelany and Moussa (2008) made a study to examine the reproductive health awareness among educated young women in Egypt. The aim of the study was to assess the awareness of female Egyptian university regarding reproductive health issues, and determine the factors contributing to the students' awareness. A cross-sectional survey was conducted, in which 220 female Egyptian university students by purposive random sampling were interviewed by means of an in-depth questionnaire. The interviews were private and confidential, and the questions concerned female reproductive anatomy and physiology; sexually transmitted diseases and HIV/AIDS; personal preferences, such as age of marriage and spacing between pregnancies; and where young women can access RH care. A large proportion of the participants exhibited misunderstanding or a complete lack of knowledge about important RH issues. This overall result, which was determined to be attributable to age and socio cultural factors such as education level, comes as a source of concern for both health service providers and policy makers.

Dido (2007) studied reproductive health awareness among the secondary school students in Eastern Province of Congo. The main purpose of this study was to examine the reproductive health awareness among the secondary school students in Eastern Province of Congo. The study was guided by the following research questions: a) what is the level of reproductive health awareness regarding sexual development among secondary school students in Dungu-durumao Diocese, Eastern Province of DR Congo? b) To what extent do the secondary school students in Dungu-durumao Diocese, have knowledge about human sexuality and HIV/AIDS? c)

What kind of sexual behavior do students of secondary schools in Dungu-durumao Diocese, Eastern Province of DR Congo display? d). what is the attitude of Students towards HIV/Aids in Dungu-durumao Diocese, Eastern Province of DR Congo? e) What are the possible solutions to the students' low reproductive health awareness in secondary schools in Eastern Province of DR Congo? The data was collected using questionnaire from two upper classes (form 5 and 6) from 2 schools in Eastern Province of Congo. The sample of students consisted of forty five (n=45) students. The sample was selected using a mixture of random and purposive sampling techniques. The schools were sampled using purposive sampling procedure because of their accessibility while students in the two classes were sampled using random sampling technique. The study employed SPSS (Statistical Package for Social Sciences) version 10 for windows to process quantitative data. Descriptive statistics such as frequencies and percentages were used to summarize these data. The study found that majority of students had either low level of awareness (misconceptions) or ignorant about a number of issues related to reproductive health and human sexuality. These included sexual intercourse issues like orgasm and pleasure during the act; contraceptive issues (meaning and use of contraceptives); pregnancy (menses and conception); masturbation (its effects). The study recommended that the Ministry of Education should introduce sex education in secondary schools in Congoin order to create more awareness about reproductive health and human sexuality among students. Parents and teachers should also provide adolescents with right support and guidance in relation to sexuality in order to enhance positive behavior and right attitudes.

Jo and Wan (2007) conducted a study on Cancer Awareness of a Sample of Malaysian Undergraduate Students. The aim of the study was to assess the cancer awareness of Malaysian undergraduate students. Cancer is the second cause of premature deaths globally. In Malaysia, a total of 18,219 new cancer cases were diagnosed in 2007. Cancer is preventable and potentially avoidable disease, mainly by tackling modifiable risk factors, increasing participation in cancer screening tests and early detection of cancer through the recognition of early cancer signs. Cancer awareness was assessed using a validated and reliable self-administered questionnaire (Cronbach's alpha coefficient > 0.77) containing 63 items which included awareness (cancer early signs and symptoms, and cancer screening tests); cancer risk factors knowledge; attitude towards cancer prevention; and barriers in seeking cancer and health information. A total of 965 students (36.0% males and 64.0% females) participated with informed consent. Majority of the students were from private universities (73.1%) while 26.9% were from public universities. Majority of the students had low awareness (94.4%) and knowledge (64.9%) scores but have high attitude scores (76.9%). Awareness, knowledge and attitude scores were significantly higher among female students and science faculty students. Only knowledge score was significantly higher among students from Chinese ethnicity. Emotional and practical barriers were determined as the main barrier in seeking medical advice among the participants. This study provides a valuable basis of information toward the formulation of relevant cancer prevention strategies, especially within the scope of health education among the undergraduate students.

Edwin and Chuen (2006) conducted a study on the education and health awareness among indigenious people. This paper investigated the education benefits and health benefits distributions amongst the Orang Asli in Malaysia. This qualitative researches study comprising 20 respondents respectively. Based on our results, it was found that majority of the Orang Asli were unhappy with the current benefits they were given and the way they are being treated. They expressed deep dissatisfaction on how their children were not given adequate help from the school officials regarding their poor academic performance. Not only have these students been neglected but to make matters worse some had to tolerate physical and verbal abuses from their schoolmates. On the other hand, the Orang Asli do not receive special medical treatments or free check-ups. They are still left in the dark and unaware of certain diseases that may pose a danger to them. Having to travel miles away to the nearest clinic or hospital is definitely a burden to them.

Grewal and Kaur (2006) studied Status of oral health awareness in Indian children as compared to Western children: A thought provoking situation (A pilot study). A study was conducted to evaluate the level of oral health awareness in a selected sample of Indian children and a selected sample of western children residing in Amritsar city of Punjab. A total of 200 children were randomly selected from two different schools and grouped as Group I and II. **Group I:** 100 Indian children studying in the senior study school at Putli-Ghar Amritsar. **Group II:** 100 non-resident American children studying at Sikh Dharma at Miri-Piri Academy, Chheharta, Amritsar. The selected subjects were between the ages of 11 and 16 years. The socio-economic status and literacy level of the parents of the Indian children were important criteria for selecting the Indian sample. Children participated in personal interviews conducted on the basis of a standardized questionnaire developed by

WHO, for health awareness in children. The questionnaire included 12 questions regarding individual views of children on their own: (i) Oral health status, (ii) Dental care, (iii) Oral health practices, (iv) Dietary habits, and (v) Parental education. When the children were asked regarding the health of their teeth and gums, 28% of American children described it as excellent as compared to 6% of the Indian group. Moreover, 16% of Indian children were not aware of the status of their own teeth and gums, Regarding the frequency and reason for the visit to the dentist, it was found that 35% of the Indian children never visited the dentist as compared to 11% of American children in the past 12 months. About 17% of Indian children responded that only when they had discomfort or pain they were taken to the dentist by their parents. On the other hand 45% of American children's visit was initiated by the dentist for routine recall or by parents for general preventive check-up. There was also significant difference in oral hygiene practices in both the groups. About the frequency of brushing, 60% the American children brushed twice a day and 47% of Indian children brushed once a day. There were some (3%) who brushed once a week in Indian group. Though the awareness regarding the fluoridated toothpaste was comparable between the two groups, the consistency of use was not same in the both groups. More than half (54%) of the American children were flossing regularly where as less than 1/7 th (15%) of the Indian children flossed regularly. Dietary habits of both the groups were comparable, which goes to show the effect of urbanization on the Indian children. The Indian group showed low level of oral health awareness and practice as compared to the western group although both the groups show comparable eating habits. The influence of urbanization and modern food habits have certainly made the Indian children at par with the western children, but their oral hygiene practices have not changed with changing times. On the other hand the western

children were more aware of regular visits to the dentist because it was initiated either by the dentist or the parents. Such an effort on the part of the parents was predominantly missing in the Indian children. This study initiates a thought provoking response from our dental health educators and providers who although repeatedly carry out dental camps for oral health awareness, do not go back to reassess the impact and the outcome of their programs on their target population.

Antje (2001) conducted a study on oral health awareness in adult patients with diabetes. The aim of this study was to investigate the oral health awareness, oral hygiene and attitudes towards general dental practitioner' (GDP) involvement in diabetes screening in adults with diabetes. Self – completion questionnaire was used. General medical practices in Warwickshire. Adults with diabetes attending clinics run by practice or diabetes nurses in general medical practices. Two hundred and twenty – nine of 615 (37.2%) questionnaire were completed in 14 general medical practices. The majority of respondents (79.8%, 178/223) visited a dentist once or twice a year, but oral care varied; 67.2% (133/198) reported brushing at least twice a day, whereas only15.3% (29/190) flossed daily. Awareness of oral health risks was limited: 69.1% (150/217) had never received any oral health advice related to their diabetes. Over half of respondents supported the idea of dentists offering screening for diabetes (121/226, 53.5%). Many adults with diabetes have poor awareness of oral care and health complications associated with diabetes, and are receiving limited advice from healthcare professionals. Training and advice for both healthcare professionals and patients concerning the importance of good oral health in patients with diabetes is needed. The role of dentists in diabetes screening and support requires further investigation.

Jagtar and Dilara (2000) studied students' awareness of health information initiatives of the governments of India and Bangladesh. This paper is based on the findings of a survey conducted at Punjabi University, Patiala (India) and the East West University, Dhaka (Bangladesh). The purpose of the study was to ascertain students' awareness of health information initiatives of the governments of India and Bangladesh. Fifty graduates each were randomly chosen as sample in both the universities. It has been found that for getting health related information, TV, newspapers, radio, bill boards, the Internet, and family members/friends are main modes for these students in both the universities. The most striking finding of this study is that whereas 60% students are aware of health schemes in Bangladesh, only 14% are aware of such schemes in India. It means the National Rural Health Mission (NRHM) has not yet gained ground in India. In both the universities, students feel that health awareness campaigns must be planned and concerted efforts must be made to improve the health care system.

Saleh (2000) made a study to examine the assessment of health awareness and its sources among journalism and mass communication students at Yarmounk University. The major objective of the study was to assess the overall health awareness level of students of the Department of Journalism and Mass Communication at Yarmouk University/Jordan who are supposed to have an important leadership role among mass media professionals in Jordan. A Health Awareness Test (HAT) was administered to a random sample of 139 students of this group (52.85% of the target population). Findings revealed that their overall average performance on the HAT was significantly much lower than the acceptable criterion score determined by the HAT authors. Female students' performance on the HAT was significantly higher than males' performance. The academic level of these students

(2nd, 3rd or 4th academic year) did not have significant influence on their scores. Furthermore, the two-way ANOVA analysis showed that there was no significant difference in the achievement of the study subjects on the HAT by sex and academic level. The major sources of the health awareness information of these students ranked by order were: mass media, self-education, academic preparation (information included in the curricula), family and peers, and finally cultural events in the form of extra-curricular activities at the University. Recommendations based upon these results are given.

Uriyoa and Edmond (1994-2004) conducted a study to determine the socio-economic status and health awareness are associated with choice of cooking oil in Costa Rica. The major objective of the study was to examine the socio-economic and lifestyle determinants of cooking oil choice in Costa Rica during the last decade (1994–2004). Cross sectional study. Subjects (total n ¼ 2274) belonged to the control population of a large case–control study; they were recruited yearly. Data about type of oil used for cooking, dietary intake, socio-economic and demographic characteristics were collected. A dietitian visited all subjects and conducted the interviews at their homes; all subjects lived in the Costa Rican central valley region. Subjects: Adult, free-living, rural and urban Costa Ricans with no history of myocardial infarction and physical or mental disability. The odds of choosing soybean over palm oil increased significantly each year (P , 0.05) and was determined by high socio-economic status (SES) and variables that suggest health awareness (self-reported history of hypertension, high cholesterol, multivitamin use and intake of green leafy vegetables). The odds of choosing other unsaturated oils, namely corn and sunflower, over soybean oil also increased yearly (P , 0.05) and was associated with the same two factors (high SES and health awareness). Palm oil users remained in the

lowest SES tertile and were more likely to live in rural areas. Across all SES tertiles, high health awareness determined the odds of choosing other unsaturated oils over palm oil, and soybean oil (P, 0.05). These data show that, in addition to SES, health awareness is associated with selection of unsaturated oils over palm oil in a developing country undergoing transition. These data should be considered when targeting nutrition messages and policies that promote better dietary choices.

CHAPTER: III

Methodology

Research is a systematic effort to gain new knowledge research simply seeks the answers of certain questions which have not been answered so far and the answers only these questions of which the answers are not available in literature (i.e.) in human knowledge. According to John. W .Best (1999) “Research is considered to be the more formal, systematic intensive process of carrying on the scientific method of analysis. It involves a more systematic structure of investigation usually resulting in some sort of formal record of procedure and a report of results or conclusions”.

According to J.V.Best, “Educational Research is that activity which is directed towards development of a science of behavior in educational situations”.

All those methods which are used by the researcher during the course of studying his research problems are termed as research methods. George J. Mouly has classified research methods into three basic types.

1. Historical method
2. Survey method
3. Experimental method

Method Adopted:

The present study attempts to explore the level of health awareness among higher secondary students. Since the problem selected is concerned with 'survey' type, the investigator has selected the normative survey method for conducting the present study.

Normative Survey Method:

The word "survey" has been derived from the words 'sur' or 'sor' and 'veeier' or 'veior' which means over and see respectively. Normative survey deals with "what is?'. Its scope is very vast. It describes and interprets what exists at present. In a normative survey we are concerned with conditions or relationships that exist, practices that prevail, beliefs, points of view or attitudes that are held, process that are going on influences that are being felt and trends that are developing. This type of research is described by various terms such as 'normative' 'descriptive survey' or trend.

Purpose and Uses of Survey Method:

- The major purpose of survey method in research is to tell, "What is?" (i.e.) is describing the problems or phenomenon.
- Normative surveys are often carried as preliminary step to be followed by researcher employing more vigorous central and more objective method.
- Surveys also serve as the direct services of valuable information regarding human behavior.
- Descriptive studies are helpful in planning various educational programmers.

Characteristics of Normative Survey Method:

- It is essential cross sectional.
- It gathers data from a relatively large number of cases at a particular time.
- It deals with clearly defined problems and has definite objectives.
- It provides information useful to the solution of local problems.
- Survey may be qualitative or quantitative.
- It requires careful analysis and interpretation of data.
- It requires logical and skillful reporting of the findings.
- It is not concerned with characteristics of individuals.
- It determines the present trends and solves current problems
- It contributes to the advancement of knowledge because affords penetrating insight in to the nature of what one is dealing.

Tools Used:

For each and every type of research we use certain instruments to gather new facts and explore new fields. Such instruments are called tools. Tools are used for the collection of data upon which hypothesis may be tested. The selection of suitable tool is the key to successful investigation. There are large number of tools and techniques available for data collection in research. In the present study the following tools were used.

1. Health Awareness Test (prepared and validated by the investigator)
2. Personal Data Sheet

1. Health Awareness Test:

In the present study, in order to find out the Health awareness of higher secondary students a "Health Awareness Test" prepared and validated by the investigator was used.

Developing the Draft Test:

First of all the investigator selected suitable items related to each dimensions. The blue print of the draft test showing the various dimensions and the number of items in each dimension is present in Table.1

Table: 1

Blue print of the draft test showing the various dimensions and the number of items in each dimensions.

Sl.no	Dimensions	Question number	Total
1.	Diseases	1-15	15
2.	Preventive measure	16-30	15
3.	Food habits	31-45	15
4.	Personal hygiene	46-60	15

The investigator in collaboration with her supervising teacher prepared 60 items. The questions were of multiple choice type. Four alternatives were given for each question. The respondent is asked to mark the response of his/ her choice on the

correct answer. A copy of Health Awareness Test (Draft Form) is given in Appendix A.

Item Analysis:

The selected 60 questions were printed and subjected to a pilot study. The test was administrated to 100 secondary school students representative of those to whom the questionnaire is finally administrated. The total score for each subject was found out. One point credit was given for each correct answer. For item analysis the answer sheets were arranged in descending order according to the scores obtained in the test. The top 27 percent of the answer sheet were classified as lower group. The number of correct responses for each item was identified for both upper and lower group.

The difficulty index and discriminating power of each item was calculated using the formulae.

$$\text{Difficulty index} = \frac{R_H + R_L}{N_1 + N_2}$$

$$\text{Discriminating power} = \frac{R_H - R_L}{N}$$

R_H = Number of correct responses in the upper group

R_L = Number of correct responses in the lower group

N = Number of students in the upper and lower group

Items having Difficulty index between 0.20 and 0.84 and Discriminating power above 0.25 were selected for the final test. Thus from the first administrate 60 questions 32 items were selected for the final test. The details of items selected is given Table: 2

Table: 2

Difficulty index and discriminating power of items in the Health Awareness Test

(Draft form)

Item no	Discriminating Power	Difficulty Index
1	0.70	0.648*
2	0.74	0.629*
3	0.629	0.685*
4	0.22	0.88
5	0.629	0.57*
6	0.22	0.85
7	0.48	0.648*
8	o.407	0.759*
9	0.55	0.648*
10	0.148	0.59
11	0.18	0.31
12	0.33	0.57
13	0.518	0.518
14	0.44	0.70
15	0.74	0.59*
16	0.18	0.5
17	0.629	0.61*

18	0.22	0.18
19	-0.07	0.296
20	0.41	0.38*
21	0.33	0.57*
22	0	0.25
23	0.11	0.59
24	0.407	0.61*
25	0.185	0.537
26	0.407	0.79*
27	0.407	0.72*
28	0.81	0.55*
29	0.46	0.18*
30	0.74	0.518*
31	0.44	0.629*
32	0.07	0.22
33	0.03	0.27
34	0.14	0.25
35	0.33	0.83*
36	0.22	0.74
37	0.59	0.703*
38	0.518	0.74*
39	0.44	0.33
40	-0.07	0.37
41	0.074	0.407*
42	0.296	0.44*
43	-0.148	0.07
44	0.296	0.55*

45	0.59	0.703*
46	0.48	0.72*
47	0.22	0.59
48	0.407	0.796*
49	0.29	0.81
50	0.48	0.648*
51	0.59	0.407*
52	0.66	0.66
53	0.33	0
54	0.37	0.703*
55	0.44	0.55*
56	-0.148	0.296
57	0.44	0.703*
58	-0.03	0.46
59	0	0.33
60	0.33	0.72*

*Indicates items selected for the final scale.

Preparation of the final test:

Out of 60 items included in the tryout 32 items were selected for the final test based on difficulty index and discriminating power of items. It was decided to give 45 minute for answering the test. The final test “Health Awareness Test” was printed with necessary instructions. A copy of Health Awareness Test is given in Appendix-B.

Validity of the test:

The validity of the test may be defined as accuracy with which the test measures when it suppose to do. According to Best, “In general a test possess validity to the exact that it measures what it claim to measure”. Validity of a test answer the question what does a test measures and how will it measures whatever it is measured for. In this study the phase validity was found out by submitting the tool to a panel of experts in the field of education. The content validity of the inventory was established by systematically analyzing area under study. On the basis of the opinion of experts the tool has sufficient coverage of its content.

Reliability of the Test:

Reliability is the accuracy or precision of measuring instrument. According to Best (1978) “a test is reliable to this extent that it measures accurately and consistently from one another”.

The reliability of a test can be assessed in different ways such as test, retest method, split half method, rational equivalence method.

A test is reliable to the extent that it measures variables consistency. In test that have a high co-efficient of reliability, errors of measurements have been reduced to the minimum. The reliability of health awareness test was found by Split half method.

Split half reliability $r = \frac{2r_1}{(1+r_1)}$

Where,

r_1 - is the correlation between odd numbered items and even numbered items

r - is the Split half reliability co-efficient

The reliability coefficient was found to be 0.8008

2. Personal Data Sheet

The personal data sheet serves to collect the personal information of the students. The students were asked to write their Name, Gender, Locality, Community, Name of the school, Type of the Management, Religion and Educational qualification of father and mother. A copy of personal data sheet is given in Appendix- B.

Sample:

Sampling involves the selection of a few items from a particular group to be studied with a view to obtain relevant data which helps in drawing conclusions regarding the entire group. The total group from which the sample is selected is called a 'population'.

The sample for the present study consisted of 400 students of standard XI studying in different schools of Kanyakumari District. The investigator has adopted stratified random sampling method.

The investigator selected 12 schools for the present study. These schools are situated in rural and urban areas. From these institutions, the investigator randomly selected 400 students (202 boys, 198 girls). Due representation was also given to the three types of institutions viz, Government, Aided, Unaided. The details of sample selected for the present study are given in Table: 3

Table: 3

Details of the sample selected

Sl. No	Name of the school	Locality	Type of management	Gender		Total
				Boys	Girls	
1	Govt .Hr.Sec.School. Munchirai	Rural	Government	5	14	19
2	Govt . Hr. Sec. School. Thiruvithancode	Rural	Government	15	5	20
3	Infant Jesus Matric.Hr.Sec.School. Mamootukadai	Rural	Unaided	16	10	26
4	C .S. I.V.V.Hr Sec.School. Irenipuram	Rural	Aided	15	12	27
5	Hebron Matric Hr.Sec.School Irullapapuram	Rural	Unaided	23	25	48
6	Govt .Boys Hr.Sec. School. Marthandam	Urban	Government	13	-	13
7	Amala Matric Hr. Sec. School. Thuckalay	Urban	Unaided	28	10	38
8	Hindu Vidyalaya Hr. Sec. School. Marthandam	Urban	Unaided	17	8	25
9	Duthie .G.Hr.Sec. School. Nagercoil	Urban	Aided	-	50	50
10	Amala Convent. G. Hr.Sec.School. Thuckalay	Urban	Aided	-	39	39
11	Govt . G.Hr.Sec.School. Marthandam	Urban	Government	-	25	25
12	S.L.B. B. Hr. Sec.School. Nagercoil	Urban	Government	70	-	70
Total						**400**

Administration of the tool:

For administration of the tool, the investigator visited various higher secondary schools in Kanyakumari District. The investigator approached the authorities of the institution and sought permission for data collection. The respondents were given a copy of Health awareness test and personal data sheet. The investigator explained the purpose of her study and instructions clearly. After marking the responses, the response sheets were collected from the respondents.

Statistical Techniques Used:

The investigator used the following statistical techniques for the analysis of data.

They are

1. Arithmetic Mean
2. Standard Deviation
3. t-test
4. ANOVA

1. Arithmetic Mean:

$$\overline{X} = A + \frac{\sum fd}{N} \times C$$

Where

$\overline{X}$ - Arithmetic Mean

A - Assumed Mean

f - Frequency of each class interval

d - deviation of scored from the assumed mean

N - Total frequency

C - Class Interval

2. Standard Deviation:

$$\sigma = \sqrt{\frac{\sum fd^2}{N} - \left(\frac{\sum fd}{N}\right)^2} XC$$

where,

σ - Standard Deviation

F - Frequency

D - Deviation of scores from the assumed mean

N - Total frequency

C - Class interval

3. **t-test:**

$$t = \frac{M_1 - M_2}{\sqrt{\frac{{\sigma_1}^2}{N_1} + \frac{{\sigma_2}^2}{N_2}}}$$

Where,

t - t value

M_1 - Mean of the first sample

M_2 - Mean of the second sample

σ_1 - Standard deviation of the first sample

σ_2 - Standard deviation of second sample

N_1 - Total number of the first sample

N_2 - Total number of the second sample

ANOVA

ANOVA was used to compare three or more groups.

$$F = \frac{V_b}{Vw}$$

Where,

V_b = Mean square variance between groups.

V_w = Mean square of variance within groups.

CHAPTER: IV

ANALYSIS AND INTERPRETATION OF DATA

Analysis of data means studying the organized in order to discover inherent facts. The data were studied from different angles 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. Data collected by the investigator get their meaning when they are subjected to statistical analysis, which describes the characteristics of data, and will give the investigator an insight into the problem. Analysis leads to the interpretation of data and interpretation implies the techniques of drawing conclusion from the analytical and critical study of data.

According to Francis Rummel, "The analysis and interpretation of data involves the objective material in the possession of the researchers and his objective reaction and desires to derive from the data inherent meaning in their to the problem. The problem should be analyzed in detail to see what data are necessary in its solution and to be assured that the methods used will provide for definite answers. The

researchers must determine whether or not chosen for study will satisfy all the condition of the problem and if the sources to be used will provide requisite data".

In the present study the data collected were analyzed using the following statistical techniques.

1. Arithmetic Mean
2. Standard Deviation
3. t-test
4. ANOVA

Health Awareness scores of Higher Secondary students:

(Total sample)

The mean and standard deviation of health awareness scores of 400 higher secondary students are given in Table:4.

Table: 4

Mean and Standard deviation of health awareness scores of higher secondary students

Number	Mean	S.D
400	17.98	5.47

The arithmetic mean was found to be 17.98 out of 32. This indicates that the higher secondary students have moderate level of health awareness.

The value obtained for standard deviation is 5.47.This shows that there is scattering of scores from the mean scores.

Health awareness scores of Boys and Girls:

The mean and standard deviation of health awareness of boys and girls given in Table:5

Table: 5

Mean and standard deviation of health awareness scores of boys and girls.

Category	Number	Mean	S.D
Boys	202	16.21	5.53
Girls	198	19.79	4.78

The mean value obtained by boys and girls were 16.21 and 19.79 respectively out of a total of 32. This shows that both boys and girls have moderate health awareness.

The values obtained for standard deviation were 5.53 for boys and 4.78 for girls. These values show that there is scattering of scores from the mean score.

Health Awareness scores of Urban and Rural Higher Secondary Students:

The mean and standard deviation of health awareness scores of urban and rural higher secondary students are given in Table: 6

Table: 6

Mean and standard deviation of health awareness scores of urban and rural higher secondary students.

Category	Number	Mean	S.D
Rural	141	19.04	5.25
Urban	259	17.41	5.51

The mean value obtained by urban and rural higher secondary students were 19.04 and 17.41 respectively out of a total of 32. This shows that both urban and rural higher secondary students have moderate health awareness.

The values obtained for standard deviation were 5.25 for urban and 5.51 for rural students. These values show that there is scattering of scores from the mean scores.

Health Awareness Scores of Higher Secondary Students belonging the various Religions:

Mean and Standard deviation of health awareness scores of Hindu, Christian, and Muslim higher secondary school students are given in Table: 7

Table: 7

Mean and Standard Deviation of Health Awareness scores of higher secondary students belonging to various Religions.

Category	Number	Mean	S.D
Hindu	193	17.38	5.36
Christian	162	18.25	5.41
Muslim	45	19.60	5.84

The mean values obtained by Hindu, Christian and Muslim higher secondary students were 17.38, 18.25 and 19.60 and respectively out of a total of 3.2. This shows that Hindu, Christian and Muslim higher secondary students have moderate health awareness.

The values obtained for standard deviation were 5.36 for Hindu students, 5.41 for Christian students, 5.84 for Muslim students. These values show that there is scattering of scores from the mean scores.

Health Awareness Scores of Higher Secondary Students belonging to various Communities

Mean and standard deviation of health awareness scores of Forward caste, Backward caste and Schedule caste higher secondary students are given in Table: 8

Table: 8

Mean and standard deviation of health awareness scores of higher secondary students belonging to various communities

Community	Numbers	Mean	S.D
FC	36	15.42	5.42
BC	333	18.38	5.53
SC	31	16.65	3.65

The mean values obtained by Forward caste, Backward caste and Schedule caste higher secondary students were 15.42, 18.38 and 16.65 respectively out of a total of 32. This shows that Forward caste, Backward caste and Schedule caste higher secondary students have moderate health awareness.

The values obtained for standard deviation were 5.42 for Forward caste students, 5.53 for Backward caste students, 3.65 for Schedule caste students. These values show that there is scattering of scores from the mean scores.

Health Awareness Scores of Higher Secondary students belonging to various Types of Management:

Mean and standard deviation of health awareness scores of Government, Aided and Unaided Higher Secondary School students are given in Table: 9

Table: 9

Mean and standard deviation of health awareness scores of Government, Aided and Unaided higher secondary school students

Community	Numbers	Mean	S.D
Govt.	148	15.23	4.53
Aided	112	19.73	5.11
Unaided	140	19.47	5.54

The mean values obtained by Government, Aided, and Unaided school students were 15.23, 19.73 and 19.47 respectively out of a total 32. This shows that Government, Aided and Unaided higher secondary school students have moderate health awareness.

The values obtained for standard deviation were 4.53 for Government school students, 5.11 for Aided school students and 5.54 for unaided school students. These values show that there is scattering of scores from the mean scores.

Health Awareness Scores of Higher Secondary Students based on Educational Qualification of Father:

Mean and standard deviation of health awareness scores of higher secondary students based on educational qualification of father are given in Table: 10.

Table: 10

Mean and standard deviation of health awareness scores of higher secondary students based on educational qualification of father

Category	Number	Mean	S.D
SSLC	114	16.96	5.35
HSC	185	17.48	5.33
Degree	101	20.06	5.37

The mean value obtained by higher secondary students whose fathers have educational qualification SSLC, HSC, and Degree were 16.96, 17.48 and 20.06 respectively out of a total of 32. This shows that all the three groups based on educational qualification of father have moderate health awareness

The values obtained for standard deviation were 5.35 for SSLC 5.33 for HSC, and 5.37 for Degree. These values show that there is scattering of scores from the mean score.

Health Awareness Scores of Higher Secondary Students based on Educational Qualification of Mother:

Mean and standard deviation of health awareness scores of higher secondary students based on educational qualification of mother are given in Table: 11

Table: 11

Mean and standard deviation of health awareness scores of higher secondary students based on educational qualification of mother

Category	Number	Mean	S.D
SSLC	130	16.89	5.51
HSC	184	18.2	5.23
Degree	86	19.17	5.67

The mean values obtained by higher secondary students whose mothers have educational qualification SSLC, HSC and Degree were 16.89, 18.2 and 19.17 respectively out of a total of 32. This shows that all the three groups based on educational qualification of mother have moderate health awareness.

The values obtained for standard deviation were 5.51for SSLC, 5.23 for HSC and 5.67 for Degree. These values show that there is scattering of scores from the mean score.

Comparison of various groups

The health awareness scores of different groups of subjects have been compared as shown below. t-test for large samples have been used for the comparison.

Comparison of health awareness scores of boys and girls:

The two groups of subjects namely the boys and girls have been subjected for the study as per the analysis given in Table: 12

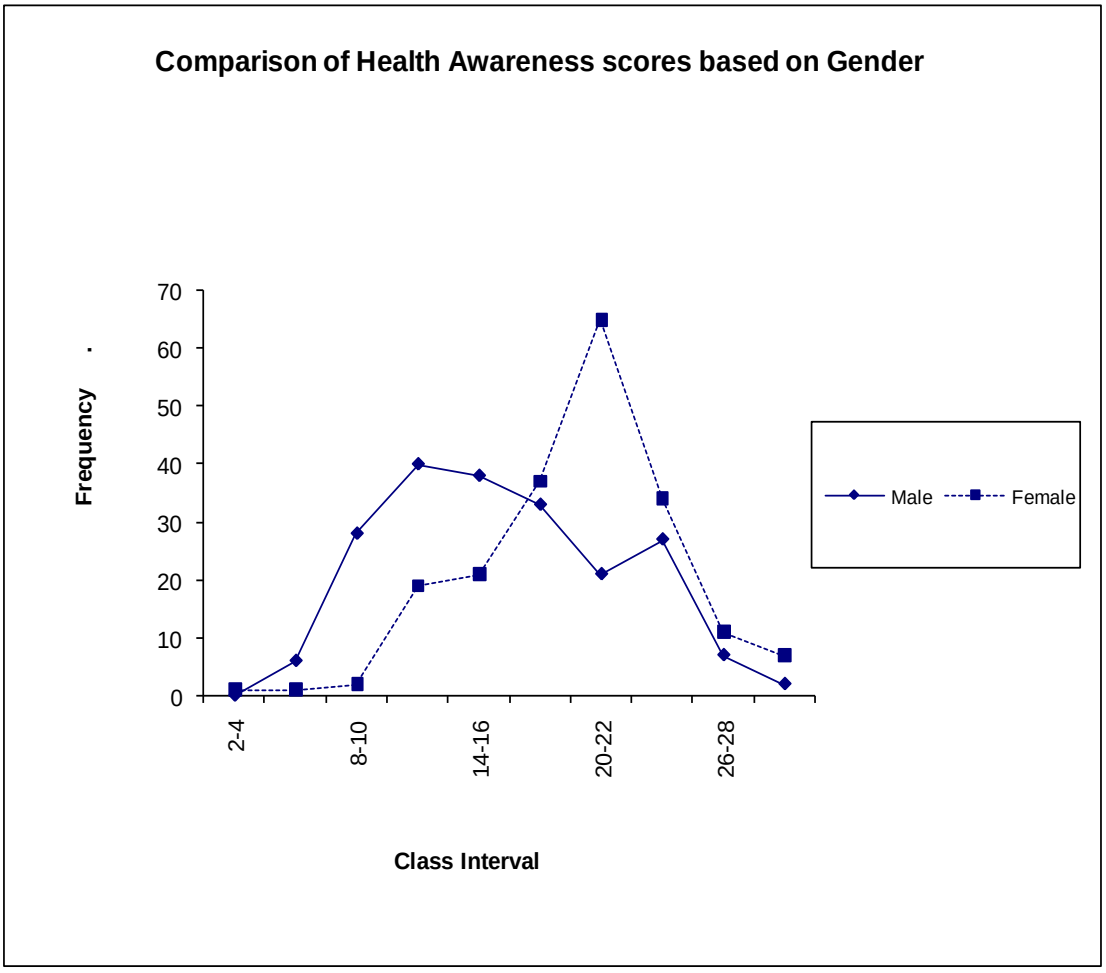
Table: 12

Mean, Standard Deviation and‘t’ value of health awareness scores of boys and girls

Gender	Number	Mean	S.D	t-value	P	Level of significance
Boys	202	16.21	5.53	6.93	0.000	0.01 level
Girls	198	19.79	4.78			

The obtained t-value (6.93) is significant at 0.01level. This result indicates that there is significant difference between the boys and girls in their health awareness. So it can be concluded that sex has influence on health awareness of higher secondary students. The comparison of the scores is graphically presented in Figure: 1

Figure: 1


Comparison of Health Awareness scores based on Gender
Frequency
70
60
50
40
30
20
10
0
2-4
8-10
14-16
20-22
26-28
Class Interval
Male
Female

Comparison of health awareness scores of Urban and Rural Higher Secondary School Students:

The t- value was calculated the find out the influence of locality on health awareness scores of higher secondary school students. Mean, Standard deviation and t- value are presented in Table: 13

Table: **13**

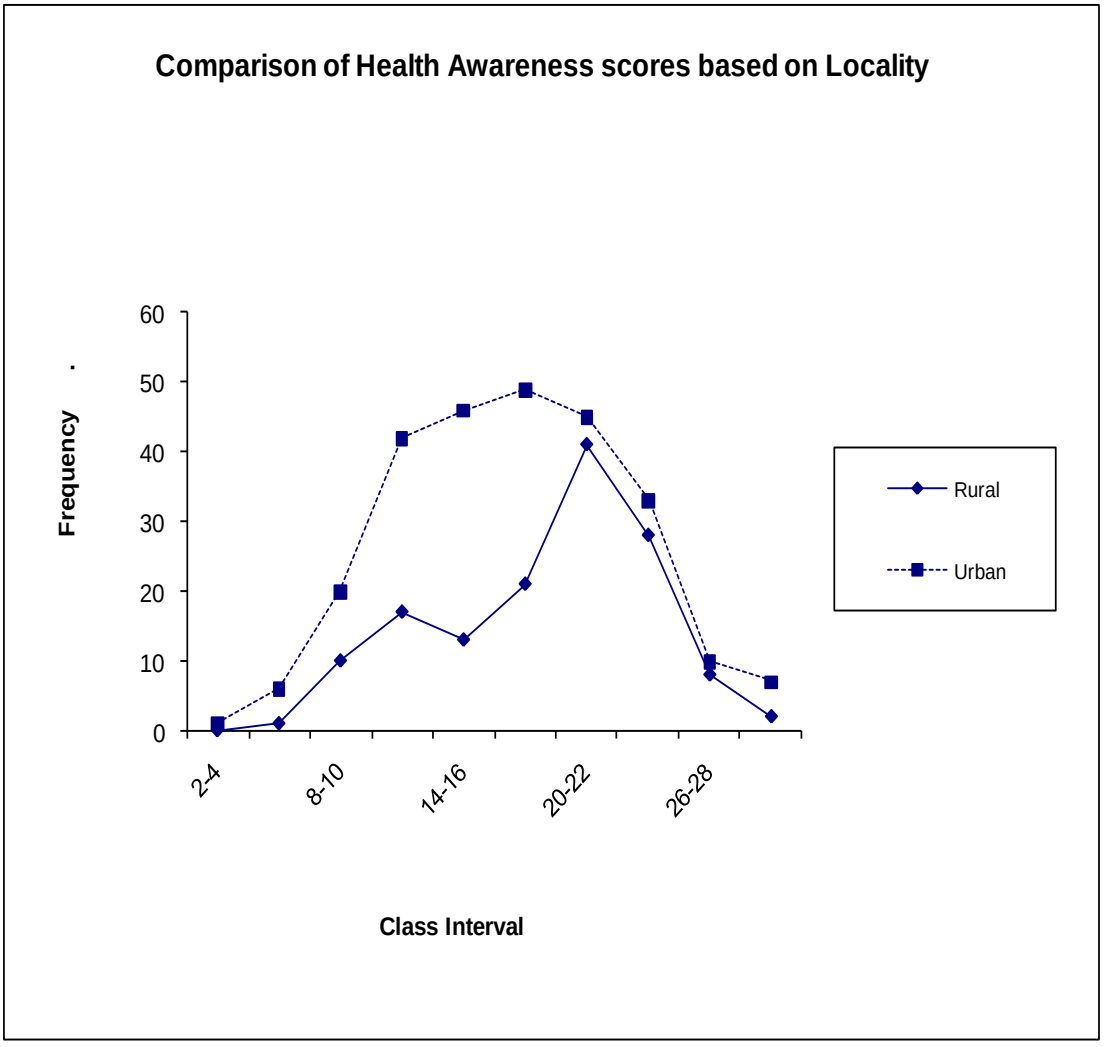
Mean and standard Deviation and t-value of health awareness scores rural and urban higher secondary students

Locality	Mean	SD	N	t	P	Remark
Rural	19.04	5.25	141	2.91	0.004	Sig.at 0.01
Urban	17.41	5.51	259			

The obtained t-value (2.91, $p<0.01$) is significant at 0.01. This result indicates there is significant difference between the rural and urban higher secondary students in their health awareness. So it can be concluded that locality has influence on the health awareness of secondary school students.

The comparison of the scores is graphically presented in figure: 2

Figure: 2


Comparison of Health Awareness scores based on Locality
Frequency
60
50
40
30
20
10
0
2-4
8-10
14-16
20-22
26-28
Class Interval
Rural
Urban

Comparison of health awareness scores based on religion:

Mean, Standard Deviation and F-value of Health Awareness scores of higher secondary students belonging to various Religions are given in Table 14

Table: 14

Mean, Standard Deviation and 'F' value of health awareness scores of higher secondary students belonging various

Religion	Mean	SD	Source	Sum of squares	df	Mean square	F	P	Remark
Hindu	17.38	5.36	Between Gp	198.33	2	99.16	3.35	0.036	Sig.at 0.05 level
Christian	18.25	5.41	Within Gp	11738.55	397	29.57			
Muslim	19.60	5.84	Total	11936.88	399				

The calculated F-value ($F=3.35$, $P<0.05$) is significant at 0.05 level. This result indicates that there exists significant difference between higher secondary students belonging to different religions in their health awareness. So it can be concluded that religion has influence on health awareness of higher secondary students.

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

Result of Scheffe's procedure is given in Table: 15

Table: 15

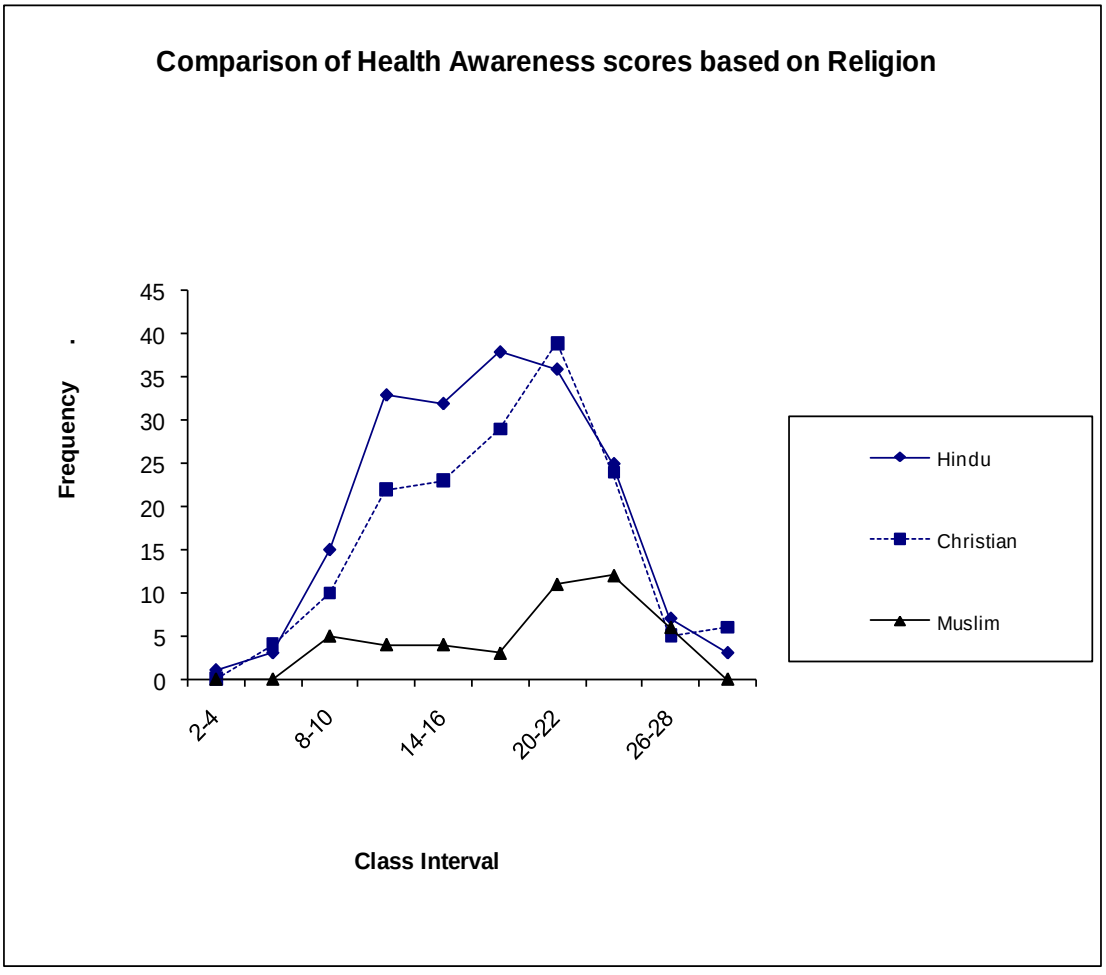
Results of Scheffe's procedure

Religion	N	Pair	p (Scheffe)	*Remark*
Hindu (A)	193	A Vs B	0.325	*NS*
Christian (B)	162	B Vs C	0.339	*NS*
Muslim (C)	45	A Vs C	0.049	*Sig. at 0.05 level*

The result showed that there exists significant difference between Hindu and Muslim higher secondary students in their health awareness. The other pairs Hindu and Christian and Christian and Muslim does not differ in their health awareness.

The comparison of the scores is graphically presented in figure: 3

Figure : 3


Comparison of Health Awareness scores based on Religion
Frequency .
45
40
35
30
25
20
15
10
5
0
2-4
8-10
14-16
20-22
26-28
Class Interval
Hindu
Christian
Muslim

Comparison of health awareness scores based on community:

Mean, Standard Deviation and 'F' value of health awareness scores of higher secondary students belonging various community are given in Table: 16

Table: 16

Mean, Standard Deviation and 'F' value of health awareness scores of higher secondary students belonging various community

Community	Mean	SD	Source	Sum of squares	df	Mean square	F	P	Remark
FC	15.42	5.42	Between Gp	346.2	2	173.12	5.93	0.003	Sig.at 0.01 level
BC	18.38	5.53	Within Gp	11590.6	397	29.20			
SC	16.65	3.65	Total	11936.9	399				

The calculated F- value (F-5.93, $p < 0.01$) is significant at 0.01 level. This result indicates that there exists significant difference between higher secondary students belonging to different communities in their health awareness. So it can be concluded that cast has influence on health awareness of higher secondary students.

The result does not help to identify exactly the pairs of groups which differ significantly. Hence Scheffe multiple comparison is used for further analysis. Result of Scheffe's procedure is given in Table 17

Table : 17

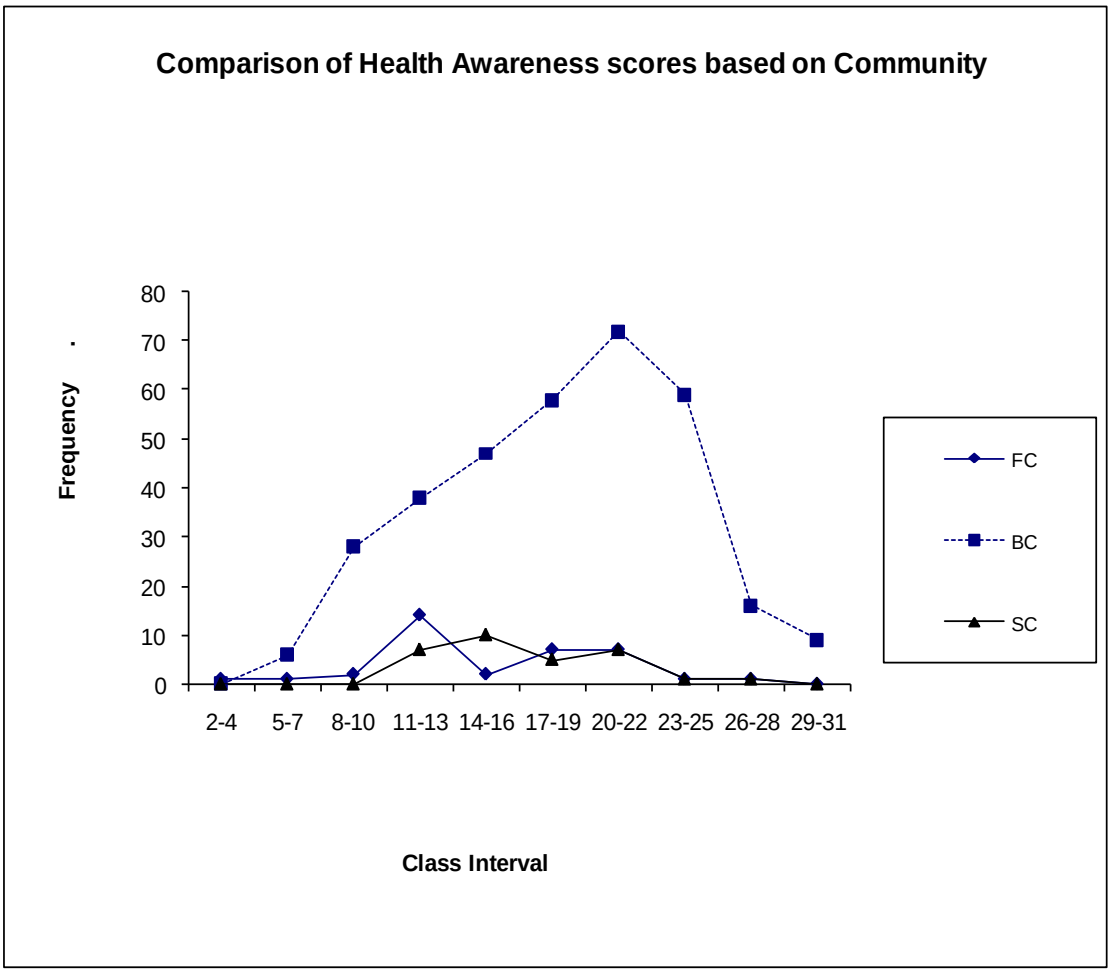
Results of Scheffe's procedure

Community	N	Pair	p (Scheffe)	*Remark*
FC (A)	36	A Vs B	0.008	*Sig. at 0.01 level*
BC (B)	333	B Vs C	0.235	*NS*
SC (C)	31	A Vs C	0.650	*NS*

The result showed that there exists significant difference between Forward caste and Backward caste higher secondary students in their health awareness. The other pairs Backward caste and Schedule caste and Forward caste and Schedule do not differ in their health awareness.

The comparison of the scores is graphically presented in Figure: 4.

Figure: 4


Comparison of Health Awareness scores based on Community
Frequency
80
70
60
50
40
30
20
10
0
2-4
5-7
8-10
11-13
14-16
17-19
20-22
23-25
26-28
29-31
Class Interval
FC
BC
SC

Comparison of Health Awareness scores based on Type of Management

Mean, Standard Deviation and 'F' value of health awareness scores of higher secondary students belonging to various Type of Management are given in Table: 18

Table: 18

Mean, Standard Deviation and 'F' value of health awareness scores of higher secondary students belonging to various Type of Management

Type of management	Mean	SD	Source	Sum of Squares	df	Mean Square	F	*p*	*Remark*
Govt.	15.25	4.53	Between Gp	1758.28	2	879.14	34.29	*0.000*	*Sig. at 0.01 level*
Aided	19.73	5.11	Within Gp	10178.60	397	25.64			
Private	19.47	5.54	Total	11936.88	399				

The calculated 'F' value (F-34.29: $p < 0.05$) is significant at 0.01 level. This result indicates that there exists significant difference between higher secondary students belonging to different types of management in their health awareness. So it can be concluded that type of management of the school has influence on health awareness of higher secondary students.

The result does not help to identify exactly the pairs of groups which differ significantly. Hence Scheffe multiple comparison is used for further analysis. Result of Scheffe's procedure is given in Table: 19

Table: 19

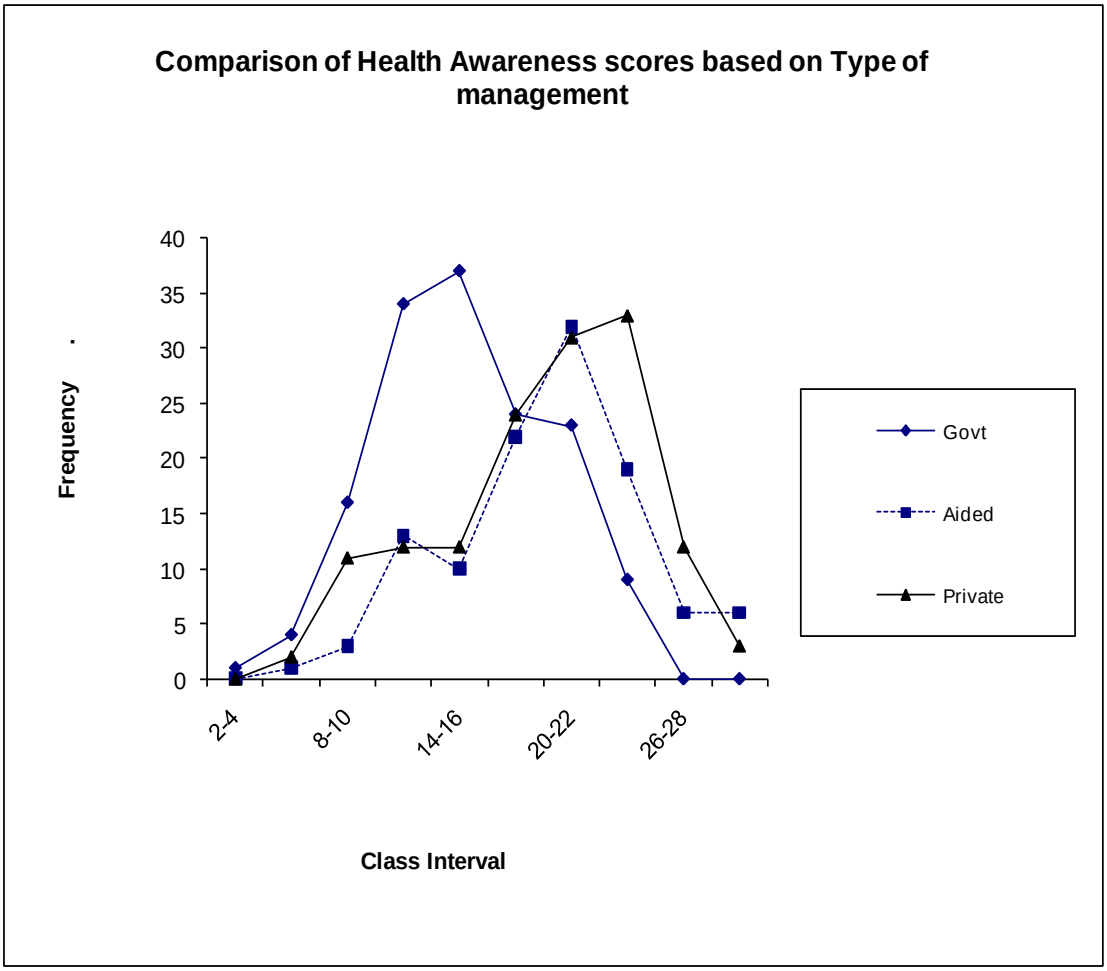
Results of Scheffe's procedure

Type of management	N	Pair	p (Scheffe)	*Remark*
Government (A)	148	A Vs B	0.000	*Sig. at 0.01 level*
Aided (B)	112	B Vs C	0.921	*NS*
unaided (C)	140	A Vs C	0.000	*Sig. at 0.01 level*

The result showed that there exists significant difference between Government and Aided and Government and Private higher secondary students in their health awareness. The other pair Aided and Unaided higher secondary students does not in their health awareness.

The comparison of the scores is graphically presented in Figure: 5

Figure: 5


Comparison of Health Awareness scores based on Type of management
Frequency
40
35
30
25
20
15
10
5
0
2-4
8-10
14-16
20-22
26-28
Class Interval
Govt
Aided
Private

Comparison of Health Awareness Scores based on Educational Qualification of Father:

Mean, Standard Deviation and F- value of health awareness scores based on Educational Qualification of Father are given in Table: 20

Table:20

Mean, Standard Deviation and F- value of health awareness scores based on Educational Qualification of Father

Ednl Qualfn of father	Mean	SD	Source	Sum of Squares	df	Mean Square	F	*P*	*Remark*
SSLC	16.96	5.35	Between Gp	602.27	2	301.13	10.55	*0.00*	*Sig. at 0.01 level*
HSC	17.48	5.33	Within Gp	11334.6	397	28.55			
Degree	20.06	5.37	Total	11936.9	399				

The calculated 'F' value (F-10.55, P < 0.01) is significant at 0.01 level. This result indicates that there exists significant difference in the mean scores of health awareness of higher secondary student with respect to the educational qualification of father.

The result does not help to identify exactly the pairs of groups which differ significantly. Hence Scheffe multiple comparison is used for further analysis. Results of Scheffe's procedure is given in Table: 21

Table:21

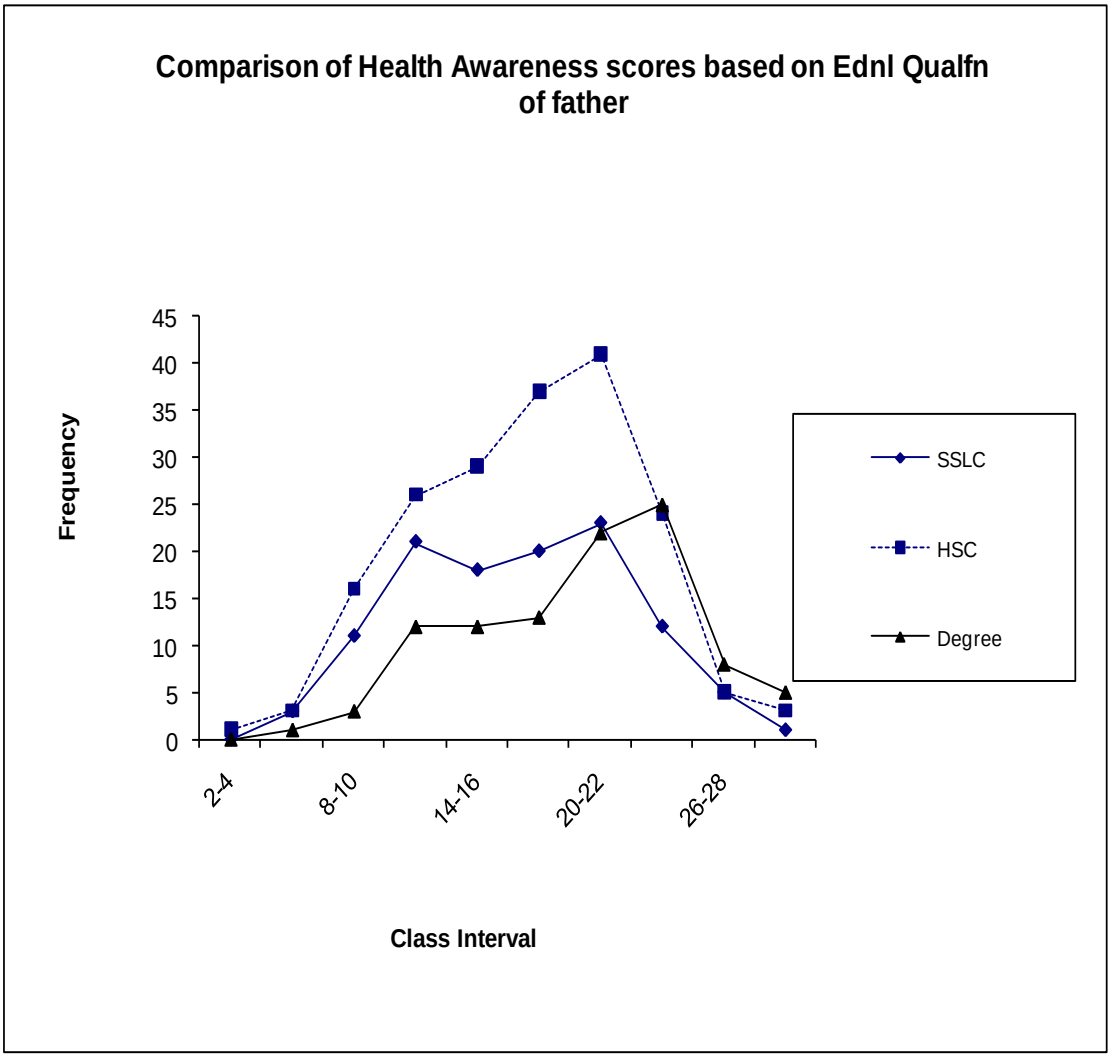
Result of Scheffe procedure of the three groups

Ednl Qualfn of father	N	Pair	p (Scheffe)	*Remark*
SSLC (A)	114	A Vs B	0.716	*NS*
HSC (B)	185	B Vs C	0.001	*Sig. at 0.01 level*
Degree (C)	101	A Vs C	0.000	*Sig. at 0.01 level*

The result showed that there exists significant difference between the students whose fathers have educational qualification HSC and Degree and SSLC and Degree of higher secondary students in their health awareness. The other pair SSLC and HSC does not differ in their health awareness.

The comparison of the scores is graphically presented in Figure : 6

Figure :6


Comparison of Health Awareness scores based on Ednl Qualfn of father
Frequency
45
40
35
30
25
20
15
10
5
0
2-4
8-10
14-16
20-22
26-28
Class Interval
SSLC
HSC
Degree

Comparison of Health Awareness scores based on Educational Qualification of Mother:

Mean, Standard Deviation and F- value of health awareness scores based on Educational Qualification of Father are given in Table: 22

Table:22

Mean, Standard Deviation and F-value of health awareness scores of based on Educational Qualification of Mother

Ednl Qualfn of mother	Mean	SD	Source	Sum of Squares	df	Mean Square	F	*p*	*Remark*
SSLC	16.89	5.51	Between Gp	285.04	2	142.52	4.86	*0.008*	*Sig. at 0.01 level*
HSC	18.2	5.23	Within Gp	11651.8	397	29.35			
Degree	19.17	5.67	Total	11936.9	399				

The obtained 'F; value (F-4.86; P <0.01) is significant at 0.01 level. This result indicates that there exists significant difference in the mean scores of health awareness of higher secondary students with respect to the educational qualification of mother.

The result does not help to identify exactly the pairs of groups which differ significantly. Hence Scheffe multiple comparison is used for further analysis. Results of Scheffe's procedure is given in Table:23

Table:23

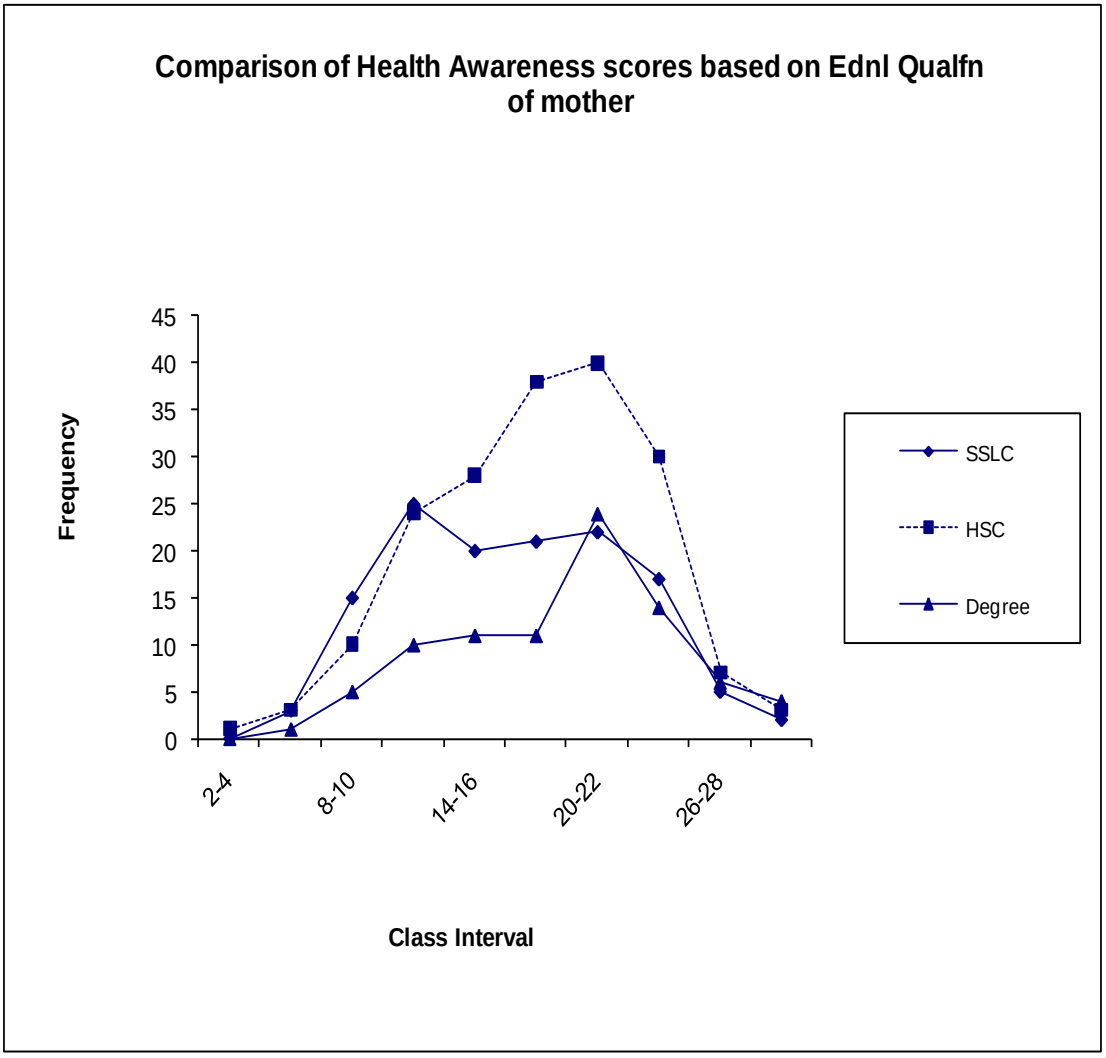
Result of Scheffe procedure of the three groups

Ednl Qualfn of mother	**N**	**Pair**	**p (Scheffe)**	***Remark***
SSLC (A)	130	A Vs B	0.109	*NS*
HSC (B)	184	B Vs C	0.392	*NS*
Degree (C)	86	A Vs C	0.011	*Sig. at 0.05 level*

The result showed that there exists significant difference between the students whose mothers have educational qualification SSLC and Degree in their health awareness. The other pairs SSLC and HSC and HSC and Degree do not differ in their health awareness.

The comparison of the scores is graphically presented in Figure: 7

Figure:7


Comparison of Health Awareness scores based on Ednl Qualfn of mother
Frequency
45
40
35
30
25
20
15
10
5
0
2-4
8-10
14-16
20-22
26-28
Class Interval
SSLC
HSC
Degree

CHAPTER: V

Findings, Conclusion and Suggestions

In this chapter an attempt is made by the investigator to summarize all the findings and conclusions drawn from the present study.

Major findings of the study:

(1) The higher secondary school students have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 17.98 for a total score of 32 and the standard deviation of 5.47)

(2) The higher secondary school boys have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 16.21 for a total score of 32 and the standard deviation of 5.53)

(3) The higher secondary school girls have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 19.79 for a total score of 32 and the standard deviation of 4.78)

(4) The rural students have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 19.09 for a total score of 32 and the standard deviation of 5.25)

(5) The urban students have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 17.41 for a total score of 32 and the standard deviation of 5.51)

(6) The Hindu students have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 17.38 for a total score of 32 and the standard deviation of 5.36)

(7) The Christian students have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 18.25 for a total score of 32 and the standard deviation of 5.41)

(8) The Muslim students have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 19.60 for a total score of 32 and the standard deviation of 5.84)

(9) The forward caste students have low health awareness. This result is supported by the following findings. (Arithmetic mean of 15.42 for a total score of 32 and the standard deviation of 5.42)

(10) The backward students have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 18.38 for a total score of 32 and the standard deviation of 5.53)

(11) The scheduled caste students have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 16.65 for a total score of 32 and the standard deviation of 3.65)

(12) The government higher secondary school students have low health awareness. This result is supported by the following findings. (Arithmetic mean of 15.23 for a total score of 32 and the standard deviation of 4.53)

(13) The aided higher secondary school students have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 19.73 for a total score of 32 and the standard deviation of 5.11)

(14) The unaided higher secondary school students have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 19.47 for a total score of 32 and the standard deviation of 5.54).

(15) The higher secondary school students whose fathers have educational qualification SSLC have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 16.96 for a total score of 32 and the standard deviation of 5.35)

(16) The higher secondary school students whose fathers have educational qualification HSC have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 18.2 for a total score of 32 and the standard deviation of 5.23)

(17) The higher secondary school students whose fathers have educational qualification Degree have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 20.01 for a total score of 32 and the standard deviation of 5.37)

(18) The higher secondary school students whose mothers have educational qualification SSLC have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 16.89 for a total score of 32 and the standard deviation of 5.51)

(19) The higher secondary school students whose mothers have educational qualification HSC have moderate health awareness. This result is

supported by the following findings. (Arithmetic mean of 18.2 for a total score of 32 and the standard deviation of 5.23)

(20) The higher secondary school students whose mothers have educational qualification Degree have moderate health awareness. This result is supported by the following findings. (Arithmetic mean of 19.71 for a total score of 32 and the standard deviation of 5.67)

(21) There exists significant difference between the male and female higher secondary students in their health awareness. This result is supported by the following findings. (t= 6.93 which is significant at 0.01 level)

(22) There exists significant difference between the rural and urban higher secondary students in their health awareness. This result is supported by the following findings.(t= 2.91 which is significant at 0.01 level)

(23) There exists significant difference among the higher secondary students belonging to different religions in their health awareness. This result is supported by the following findings. (F= 0.036 which is significant at 0.05 level)

(24) There exists significant difference among the higher secondary students belonging to different communities in their health awareness. This result is supported by the following findings. (F=5.93 which is significant at 0.01 level)

(25) There exists significant difference among the higher secondary students belonging to different type of management in their health awareness. This result is supported by the following findings. (F= 34.29 which is significant at 0.01 level)

(26) There exists significant difference between the higher secondary students whose father's have various educational qualification in their health awareness. This result is supported by the following findings. (F- 10.55 which is significant at 0.01 level)

(27) There exists significant difference between the higher secondary students whose mothers have various educational qualification in their health awareness. This result is supported by the following findings. (F- 4.86 which is significant at 0.01 level)

Conclusions:

The following conclusions were drawn from the present study.

1. The higher secondary school students have moderate health awareness.
2. The health awareness of girls was higher than that of boys.
3. The health awareness of rural higher secondary students was higher than that of urban higher secondary students.
4. Sex, Locality, Religion, Type of Management of schools and educational qualification of parents have influence on the health awareness of higher secondary students.

Suggestions for Improvement:

From the present study it is clear that the higher secondary students of Kanyakumari District have moderate level of health awareness. The following suggestions can be given for the improvement of health awareness of higher secondary students.

1. School level activities about health care should be organized.
2. Health awareness can be created through programs like drama, mime etc.
3. Health education should be introduced from elementary school level.
4. Health education should be included along with regular subjects in the curriculum.
5. Special talks on health awareness should be arranged in schools.
6. Students should be encouraged to use mass media to get more information about health.
7. "World Health Day" should be celebrated in schools.

Suggestions for further research:

In order to make the present study more meaningful and objective similar studies in this area could be carried out. The desirable areas for further research are the following.

- The present study was confined only on higher secondary students. Similar studies can be conducted at middle and high school level.
- This study is conducted only in Kanyakumari District. This study can be extended to other districts also.
- The present study may be repeated for a large sample representing the whole state.
- A study can be conducted to find out the health awareness of prospective teachers.
- A study can be conducted to find out the health awareness of local people.

BIBLIOGRAPHY

BOOKS

1. Good , C.V. (1945). Dictionary of Education. New York: M.C. Graw Hill Book Company, Inc – 1945.
2. Best, J.W. (1986). Research in Education. New Delhi: prentice – hall of India, Pvt.ltd.
3. Sidhu, K.S. (2007). Methodology of Research in Education. New Delhi: Sterling Publishers Pvt.Ltd
4. Gupta, S.P.(1987). Statistical methods. New Delhi: Sulthan Chand and Sons.
5. Sharma. R.A. (2007). Fundamental of Educational Research. Meerut : International Publishing House.
6. Meenakshisundaram .A. (2001). Physical and Health Education. Chinnalapatti: Kavyamala Publishers.
7. Dash,B.V (2000). Health & Physical Education. Hyderabad :Neelkamal Publication,Pvt.Ltd.
8. Venkataiah, (2002). Teaching Food and Nutrition. New Delhi: Anmol Publication.
9. Roeddy, R.S. (1989). Teaching Health and Nutrition. New Delhi: Common Wealth Publishers.
10. Nanda,V.K.(1997). Health Education. New Delhi: Anmol Publications.

JOURNALS

1. Sreedhar, M. (2013). International Journal of Research & Development of Health. Vol.I. issue: 2.
2. Shuha Dube and Kirti Sharma (2008). Journal of Oral Science. Vol :50, no:3.
3. Shyamal Kumar Biswas (2013). Indian Journal of Research. Vol :2, Issue:1,January 2013.
4. Biswas, J.(2010) . Kathmandu University Medical Journal. Vol :8, No:3
5. Das (2007). International journal of Men's Health. June 22
6. Ashok V Patil. (2010). International Jouurnal of Clinical Dental Science. Vol :1 no:1
7. Biswas & Shymal Kumar. (2013). Vol :2 . issue :12
8. Kotecha P.V, (2009). Indian journal of Sexually Transmitted Diseases. Vol :30. Issue :2
9. Christine Blue, (2011). Journal of Dental Hygiene Spring. Vol 85, No:2
10. Saleh, S (2000). International Quarterly of Community Health Education. Vol:17 , no:1
11. Kate ,M (2004). Reproductive Health. Vol: 1, No:7
12. Prateek , S. (2012). Journal of Family and Reproductive Health. Vol:5, no:4

WEBSITES

1. http:// intjdc.org/index.php/ injdc/artide/…./pdf
2. http:// www.ijdr.in/article.as/issn....
3. http:// www.studymode.com/profile/cassies90-81084701/
4. www.ccsenet.org/journal/index..../32146
5. http://www.files .erics.ed.gov/fulltext/ EJ970368.pdf
6. www.termedia.pl/.../streszczenie-21819
7. http://www.ifla.org/en/ifla76
8. www.ncbi.nlm/nih.gov/pubmed/1647893
9. www.ejouralofscience.org/.../vol2no8-9....
10. www.researchgate.net/.../
11. www.pubs.sciepub.com/ajcp/1/13/
12. www.sciencedirect.com/.../
13. www.ncbi.nlm.nib.gov/pubmed/17391550
14. http://journal.archives15.webs.coom/278-284
15. http://du.se/pagefiles/91599/abstracts.pdf
16. www.researchgate.net/.../233740046

APPENDICES

APPENDIX - A

HEALTH AWARENESS TEST

Prepared by (ASHA.S.M & Dr. Mini Kumari.V.S)

(Draft Form)

Instruction:

Certain statements related to health are given below. Read carefully each statement and put a tick mark (√). Attend all statements without omission. Your responses will be kept confidential and used for research purpose only.

****

1. Expulsion of excess unused glucose in the urine due to less production of insulin leads to _____

   a) Diabetes Mellitus b) Diabetes Insipidus

   c) Renal failure d) Obesity

2. An inherited disorder of Melanin metabolism is _____

   a) Sickle cell anaemia b) Haemophilia

   c) Albinism d) Thalassemia

3. Which of the following is a protein deficiency disease?

   a) Marasmus b) Kwashiorkar

   c) Both A and B d) None of these

4. Name the disease that occurs due to the deficiency of vitamin 'D'?

   a) Sterility b) Rickets

   c) Scurvy d) All the above

5. Which of the following is a viral disease?

   a) Leprosy b) Polio

   c) Dandruff d) Malaria

6. Which of the following disease is transmitted through air?

   a) Tuberculosis b) Meningitis

   C) Typhoid d) Cholera

7. One of the means of indirect transmission of a disease is _____

   a) Sneezing b) Droplet from mouth

   c) Placenta d) Utensils of patients

8. What is the name of a protozoan parasite that cause Amoebiasis in man

a) Entamoeba histolytica b) Ring warm

c) Both A and B d) None of these

9. Which test is used to find out AIDS?

a) ELISA b) Western Blot

c) Both A and B c) None of these

10) Jaundice affects _____

a) Heart b) Liver

c) Lungs d) Mind

11) Hepatitis B causes_____

a) Infection to liver b) Heart disease

c) Bone infections d) Brain damage

12) Name the virus that causes “Pig Fever”?

a) H1N1 b) HIV

c) TMV d) All the above

13) The deficiency of Thyroxine in children leads to _____

a) Diabetes b) Cretinism

c) Acromegaly d) All the above

14) Heart Attack is caused due to the increase in the level of _____

a) Blood sugar b) Blood urea

c) Cholesterol d) Blood salt

15. Which of the following is a fungal disease in man?

a) Dandruff b) Haemophilia

c) Desentry d) Meesles

16. How are infections diseases, such as colds and influenza, most commonly spread?

a) Breathing virus in air b) Hand -to – face contact

c) Drinking infected water d) Eating contaminated food

17. Which of the following will help to keep your immune system strong?

a) Proper diet b) Plenty of sleep

c) Exercise d) All the above

18. Which vaccine should be given to a 2-3 years old child?

a) Typhoid vaccine b) MMR vaccine

c) DPT and Polio d) TT and Typhoid

19. According to the CDC, when should infants start vaccinations against serious diseases?

a) 3 months old b) 10 months old

c) 1 month old d) 6 months old

20. "Sleep hygiene" refers to the promotion of regular sleep. Which of these can help you develop healthy sleep habits?

a) Have a heavy meal ate in the day

b) Go to bed and get up at the same time every day.

c) Do exercise every day.

d) All the above.

21. Dengue fever can be prevented by _____

a) Housefly control b) Mosquito control

c) Tick control d) Rat control

22. Botalism, a type of bacterial food poisoning found in tinned food items can be prevented by_____

a) Keep in fridge for ten minutes

b) Preserve in salt for one month

c) Heating the food for 100˚ C for few minutes

d) Drying

23.Before blood transfusion, we cross match the donor's and recipient's blood in order to prevent_____

a) Blood clotting b) Anaemia

c) Leukemia d) Phagocytosis

24. The vaccine which is given at birth to prevent Tuberculosis infection is _____

a) DPT b) BCG

c) TT d) OPV

25. The main nutrient needed for the repair and maintenance of body tissue is_____

a) Carbohydrate b) Protein

c) Fat d) Vitamin

26. The best and the most appropriate food for a child until it is 12 months age is_____

a) Breast milk b) Cow's milk

c) Goat's milk d) Lactoge

27. Which of the following is not a preventive measure of AIDS?

a) Not sharing the razors in saloon

b) Use of disposable syringes

c) Unprotected sexual behavior

d) Serving the blood before transfusion

28. How can we prevent Ring worm?

a) Avoid contact with infected person

b) Follow clean food habits.

c) Drink boiled water

d) Use neat toilets.

29. Which of the following is effective means of prevention of "typhoid"?

a) Isolation of patient b) Control of flies

c) Both A and B d) Clean food habits

30. Which of the following is not a preventive measure of "tuberculosis"?

a) Isolation of patient ` b) Sterilization of article used by them

c) control of flies d) Burning of sputum

31. Which of the following is not a source of protein?

a) Fish b) Meat

c) Milk d) Orange

32. The amount of water content in egg is_____

`a) 25% b) 73%

c) 75% d) 87%

33. Which nutrient provides energy to our body?

a) Fats b) protein

c) Vitamins d) minerals

34. Lack of Iron in the diet result in _____

a) Scurvy b) Anemia

c) Rickets d) Osteoporosis

35. For our health we should choose _____

a) Processed food b) natural food

c) refined d) oily food

36. Which of the following is a source of vitamin A?

a) Carrot b) Grapes

c) Chilly d) Honey

37. The rich source of protein is _____

a) Potato b) Maize

c) Fish d) Banana

38. Which is mostly found in breast milk?

a) Antibodies b) Vitamin A

c) Vitamin K d) Vitamin C

39. The main energy giving food items are _____

a) Vitamins & Minerals b) Vegetables, sugar & spices

c) Proteins, Carbohydrates &fats d) Water, oil & jiggery

40. Which of the following is essential for healthy bones and teeth?

a) Vitamin B b) Vitamin A

c) Vitamin D d) Vitamin C

41. Which of the following is source of vitamin E?

a) Olive oil b) Beef

c) Potato d) Egg

42. Drying is a ways of _____

a) Adulteration of food b) dis – infection food

c) Preservation of food d) Cooking of food

43. A nutrient which is not in egg _____

a) Vitamins b) minerals

c) Proteins d) fats

44. What is the important role of vitamin' K' ?

a) Blood clotting process b) Production of red blood cells

c) Boost the immune system d) Control cholesterol level

45. Lack of vitamin 'A' in the diet result in _____

a) Nerbvous disorder b) Profuse lose of blood

c) Bleeding gum d) Night blindness

46. How often should you get dental check-up?

a) 1-2 times per year b) Once every 2 year

c) Once every 5 year d) Never

47. What should you put on before going out on a hot day?

a) Sunscreen b) Perfume

c) Oil d) A bathing suit

48. Washing hands with soap after going to the toilet?

a) Always b) Never

c) Sometimes d) None of these

49. How often do you covering the nose and mouth when sneezing?

a) Every time b) Some time

c) Never d) None of these

50. Which are the important elements of good hygiene?

a) Good &healthy habits b) Cleanliness of the skin

c) Cleanliness of the nails & fingers d) All the above

51. When would you change the inner wear?

a) Once in every two days b) After every bath

c) Every morning d) Twice a day

52. Which of the following is a key to prevent infection and disease?

a) Good personal hygiene b) Poor personal hygiene

c) Both A and B d) None of these

53. When do you clean your room?

a) My mom does once in a while b) Every day

c) When the bin overflows d) Every week

54. Tooth brushes should be replaced every _____

a) 2 to 3 months b) 4 to 6 months

c) 7 to 9 months d) 10 to 12 months

55. When do you change the sheets?

a) Once a week b) Every day

c) Once a month d) Once every 2 months

56. How long do you brush your teeth for?

a) 0 – 30 seconds b) 30 – 60 seconds

c) 1 – 2 minutes d) More than 2 minutes

57. When it is good to brush your teeth during the day?

a) Before you eat, after you eat, and before bed

b) Whenever you want to

c) After breakfast, after lunch, & after dinner

d) After you have a drink

58. Good personal hygiene can help to prevent _____

a) Tiredness b) Infection

c) Overtraining d) All the above

59. Which of the following relieves mental tension, and fatigue?

a) Recreation b) Aerobics

c) Dancing d) Weight lifting

60. How do you keep your surrounding clean?

a) Clean the surrounding daily

b) Waste should not be thrown around the house

c) Water should not be stagnated around the house.

d) All the above.

APPENDIX - B

HEALTH AWARENESS TEST

Prepared by (ASHA.S.M & Dr. Mini Kumari. V.S)

(Final Form)

Instruction:

Certain statements related to health are given below. Read carefully each statement and put a tick mark (√). Attend all statements without omission. Your responses will be kept confidential and used for research purpose only.

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1. Expulsion of excess unused glucose in the urine due to less production of insulin leads to _____

   a) Diabetes Mellitus b) Diabetes Insipidus

   c) Renal failure d) Obesity

2. An inherited disorder of Melanin metabolism is _____

   a) Sickle cell anaemia b) Haemophilia

   c) Albinism d) Thalassemia

3. Which of the following is a protein deficiency disease?

   a) Marasmus b) Kwashiorkar

   c) Both A and B d) None of these

4. Which of the following is a viral disease?

   a) Leprosy b) Polio

   c) Dandruff d) Malaria

5. One of the means of indirect transmission of a disease is _____

   a) Sneezing b) Droplet from mouth

   c) Placenta d) Utensils of patients

6. What is the name of a protozoan parasite that cause Amoebiasis in man?

   a) Entamoeba histolytica b) Ring warm

   c) Both A and B d) None of these

7. Which test is used to find out AIDS?

   a) ELISA b) Western Blot

   c) Both A and B c) None of these

8. Which of the following is a fungal disease in man?

a) Dandruff b) Haemophilia

c) Desentry d) Meesles

9. Which of the following will help to keep your immune system strong?

a) Proper diet b) Plenty of sleep

c) Exercise d) All the above

10. “Sleep hygiene” refers to the promotion of regular sleep. Which of these can help you develop healthy sleep habits?

a) Have a heavy meal ate in the day

b) Go to bed and get up at the same time every day.

c) Do exercise every day.

d) All the above.

11. Dengue fever can be prevented by _____

a) Housefly control b) Mosquito control

c) Tick control d) Rat control

12. The vaccine which is given at birth to prevent Tuberculosis infection is _____

a) DPT b) BCG

c) TT d) OPV

13. The best and the most appropriate food for a child until it is 12 months age is_____

a) Breast milk b) Cow’s milk

c) Goat’s milk d) Lactogen

14. Which of the following is not a preventive measure of AIDS?

a) Not sharing the razors in saloon

b) Use of disposable syringes

c) Unprotected sexual behavior

d) Serving the blood before transfusion

15. How can we prevent Ring worm?

a) Avoid contact with infected person

b) Follow clean food habits.

c) Drink boiled water

d) Use neat toilets.

16. Which of the following is not a preventive measure of "tuberculosis"?

a) Isolation of patient ` b) Sterilization of article used by them

c) control of flies d) Burning of sputum

17. For our health we should choose _____

a) Processed food b) natural food

c) refined d) oily food

18. The rich source of protein is _____

a) Potato b) Maize

c) Fish d) Banana

19. Which is mostly found in breast milk?

a) Antibodies b) Vitamin A

c) Vitamin K d) Vitamin C

20. The main energy giving food items are _____

a) Vitamins & Minerals b) Vegetables, sugar & spices

c) Proteins, Carbohydrates &fats d) Water, oil & jiggery

21. Which of the following is source of vitamin E?

a) Olive oil b) Beef

c) Potato d) Eggs

22. Drying is a ways of _____

a) Adulteration of food b) dis – infection food

c) Preservation of food d) Cooking of food

23. What is the important role of vitamin' K' ?

a) Blood clotting process b) Production of red blood cells

c) Boost the immune system d) Control cholesterol level

24. Lack of vitamin 'A' in the diet result in _____

a) Nerbvous disorder b) Profuse lose of blood

c) Bleeding gum d) Night blindness

25. How often should you get dental check-up?

a) 1-2 times per year b) Once every 2 year

c) Once every 5 year d) Never

26. Washing hands with soap after going to the toilet?

a) Always b) Never

c) Sometimes d) None of these

27. Which are the important elements of good hygiene?

a) Good &healthy habits b) Cleanliness of the skin

c) Cleanliness of the nails & fingers d) All the above

28. When would you change the inner wear?

a) Once in every two days b) After every bath

c) Every morning d) Twice a day

29. Tooth brushes should be replaced every _____

a) 2 to 3 months b) 4 to 6 months

c) 7 to 9 months d) 10 to 12 months

30. When do you change the sheets?

a) Once a week b) Every day

c) Once a month d) Once every 2 months

31. When it is good to brush your teeth during the day?

a) Before you eat, after you eat, and before bed

b) Whenever you want to

c) After breakfast, after lunch, & after dinner

d) After you have a drink

32. How do you keep your surrounding clean?

a) Clean the surrounding daily

b) Waste should not be thrown around the house

c) Water should not be stagnated around the house.

d) All the above.

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

ATTOOR-620191

PERSONAL DATA SHEET

INSTRUCTION:

Kindly give the details as required. These details will be kept confidential and will be used only for research purpose.

Name of pupil :

Name of the school :

Class :

Gender : Male / Female

Locality : Rural /Urban

Religion : Hindu/Christian/Muslim

Community : FC/BC/MBC/SC

Type of Management : Government/Aided /Private

Educational qualification of parents:

(i) Father: Below SSLC/ SSLC or above/ UG

(ii) Mother: Below SSLC/ SSLC or above/ UG