

**EFFECTIVENESS OF VIDEO ASSISTED
INSTRUCTIONS ON KNOWLEDGE AND PRACTICE
REGARDING DENTAL HEALTH AMONG EARLY
ADOLESCENTS IN SELECTED SCHOOL AT
MADURAI.**

**M.Sc. (NURSING) DEGREE EXAMINATION
BRANCH-II CHILD HEALTH NURSING**

**COLLEGE OF NURSING,
MADURAI MEDICAL COLLEGE, MADURAI – 625020.**



A dissertation submitted to
**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY
CHENNAI-600032.**

In partial fulfillment of the requirement for the degree of
MASTER OF SCIENCE IN NURSING

APRIL – 2013

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KNOWLEDGE AND PRACTICE REGARDING DENTAL
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SCHOOL AT MADURAI.**

Approved by the Dissertation Committee on _____

Expert in Nursing Research _____

Mrs.S.POONGUZHALI M.Sc.(N)., M.B.A., Ph.D.,
Principal I/C, Reader in Nursing,
College Of Nursing,
Madurai Medical College,
Madurai – 625020.

Expert in Clinical Specialty _____

Mrs. R.JEYASUNDARI M.Sc.(N)., M.A., M.A., M. Phil.,
Head of the Department of Child Health Nursing,
College of Nursing,
Madurai Medical College,
Madurai – 625020

Medical Expert _____

Dr. G.MATHEVAN, M.D., D.Ch.
Professor and Head of the Department of Child Health,
Government Rajaji Hospital,
Madurai – 625020.

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CERTIFICATE

This is to certify that this dissertation titled, **EFFECTIVENESS OF VIDEO ASSISTED INSTRUCTIONS ON KNOWLEDGE AND PRACTICE REGARDING DENTAL HEALTH AMONG EARLY ADOLESCENTS IN SELECTED SCHOOL AT MADURAI.** is the bonafide work done by **Mr. P.Thirunagalinga pandiyan** College of Nursing, Madurai Medical College, Madurai - 625020, and submitted to the Tamilnadu Dr. M.G.R. Medical University, Chennai in partial fulfillment of requirements for the award of the degree of Master of Science in Nursing, Branch II, Child Health Nursing under our guidance and supervision during the academic period from 2011-2013.

MRS.S. POONGUZHALI _____
M.Sc.(N)., M.B.A., Ph.D.,

PRINCIPAL I/C
College of Nursing,
Madurai Medical College,
Madurai- 625020.

Dr. N. MOHAN M.S., F.I.C.S.,F.A.I.S.,

DEAN
Madurai Medical College,
Madurai- 625020.

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ABSTRACT

Effectiveness Of Video Assisted Instructions On Knowledge And Practice Regarding Dental Health Among Early Adolescents In Selected School At Madurai.

Objective: The main objective was to evaluate the effectiveness of video assisted instructions On knowledge and practice regarding dental health among early adolescents. **Conceptual Framework:** It was based on Weidenbach's Helping Art of Clinical Nursing Theory. **Design:** This study employed a **Pre Experimental – One Group Pre Test & Post Test Design**. Patients were selected using Purposive sampling method. **Setting of the Study:** This study was conducted at the Sri Gopalakrishna Higher secondary School Siruthur Madurai 14. **Subjects:** Totally 60 students were included in the study. **Intervention:** Video Assisted Instructions on knowledge and practice regarding dental health. **Results:** Pre test dental health knowledge and practice mean were 2.53 and 3.11, standard deviations were 1.38 and 1.41 also mean % were 25 and 31 respectively. Post test dental health knowledge and practice mean were 8.3 and 8.73 standard deviation were 1.07 and 1.15 also mean % were 83 and 87 (P value 0.000) **Conclusion:** Early adolescents who listened to 30 minutes of video assisted Instructions regarding dental health through video and pamphlet and handout had a statistically significant in improving knowledge and practice of dental health and recommended school administrator to include the dental health in the curriculum.

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Introduction

CHAPTER-I

INTRODUCTION

**“Children are nation wealth
What is done to the children
They will do to the society and nation”**

-Karl Menninger

Children are the major consumers of health care. In India about 35 percent of total populations are children below 15 years of age .They are not only the large in number but vulnerable to various health problems and considered as special risk group. Majority of the childhood sickness and death are preventable by simple low cost measures. Good health of these precious members of the society should be ensured as prime importance in all countries.

A child is unique individual he or she is not a miniature adult, not a little man or woman. The childhood period is vital because of socialization process by the transmission of attitude, customs, and behavior through the influence of the family and community .Family’s cultural and religious belief, educational level and ways of living influence the promotion and maintenance of child health.

Humans have two sets of teeth, primary (or baby) teeth and then permanent teeth, which develop in stages. Although the timing is different, the development of each of these sets of teeth is similar. Teeth tend to erupt in parallel, meaning that the top molar on your left side should grow in at about the same time as the top molar on the right. Tooth development begins long before your first tooth becomes visible. For example, a baby’s first tooth appears at around six months of age, but development of those teeth actually begins during the early second trimester of pregnancy. The crown of a tooth forms first, while the roots continue to develop even after the tooth has erupted. The 20 primary teeth are in place by age 3 and remain until around 6 years of age when they begin to fall out to make way for the permanent set of teeth. Adult teeth start to grow in between 6 and 12 years of age. Most adults have 32 permanent teeth. Permanent teeth are larger and take longer to grow in than primary teeth. A tooth is divided into two basic parts: the crown, which is the visible, white part of the

tooth, and the root, which you can't see. The root extends below the gum line and anchors the tooth into the bone.

Teeth help you chew your food, making it easier to digest. Each type of tooth has a slightly different shape and performs a different job. Types of teeth include **Incisors** are the eight teeth in the front and center of our mouth (four on top and four on bottom). These are the teeth that we use to take bites of our food. Incisors are usually the first teeth to erupt, at around 6 months of age for our first set of teeth, and between 6 and 8 years of age for our adult set. **Canines** are the next type of teeth to develop. These are our sharpest teeth and are used for ripping and tearing food apart. Primary canines generally appear between 16 and 20 months of age with the upper canines coming in just ahead of the lower canines. In permanent teeth, the order is reversed. Lower canines erupt around age 9 with the uppers arriving between 11 and 12 years of age. **Premolars** are used for chewing and grinding food. We have four premolars on each side of our mouth, two on the upper and two on the lower jaw. The first premolars appear around age 10 and the second premolars arrive about a year later. **Molars**. Primary molars are also used for chewing and grinding food. These appear between 12 and 15 months of age. These molars are replaced by the first and second permanent molars (four upper and four lower). The first molars erupt around 6 years of age while the second molars come in between 11 and 13 years of age. **Third molars**. Third molars are commonly known as **wisdom teeth**. These are the last teeth to develop and do not typically erupt until age 18 to 20, and some people never develop third molars at all. For those who do, these molars may cause crowding and need to be removed. Our mouth is important. Don't take our teeth or oral health for granted. For good dental health, brush and floss our teeth regularly, don't smoke, eat a healthy diet, and see our dentist regularly for dental cleanings and checkups. A healthy mouth makes for a healthy body ... and a pretty smile.

The mouth is one of the chief portals of entry of disease causing bacteria and is an ideal incubator for germs. It is an entrance to both respiratory and alimentary tract, a double gateway needing double guarding. Care of teeth and mouth helps to prevent tooth decay, gum disease, parotid gland infections and mouth sores. Mechanical cleansing and forceful rinsing is important to get rid of food particles from around teeth and gums. The remote damage from the infected or diseased teeth

and gums may be serious. Pus may be absorbed, from such a place which forms a focus of infection into the blood and lymph, be carried to joints, kidney and heart. A clean mouth has a markedly good effect on appetite and digestion. Cleansing the mouth gives great relief from discomfort and frees the mouth from bad tastes and odors. There is a social and psychological value in increasing the children's sense of well being as well as economic in saving their teeth. Preventing tooth decay can become even easier.

The survey, which was conducted by Indian Market Research Bureau on (2010), was carried out across India with the aim of finding out about general standards of dental health and the nature of dental habits in the country. Amongst the most shocking of revelations is that nearly half of Indians do not use a toothbrush; only 51 percent of people surveyed said they regularly brushed their teeth using a toothbrush and toothpaste. Only 28 percent of participants said they brushed their teeth twice a day and 34 percent said that brushing their teeth once a day was sufficient for good oral health. Perhaps the most alarming statistics were those relating to the consequences of poor oral hygiene; 56 percent of people thought there were no serious consequences of never changing a toothbrush and 65 percent of people believed that their diet had no significant influence on their dental health. Both of these revelations show a very poor understanding of oral hygiene and oral health across India. Unsurprisingly, standards of oral health are very poor in India, with a large proportion of the population affected by conditions such as gum disease and tooth decay; in addition to this, two thirds of people have never seen a dentist. At regular check-up visits, our dentist or dental hygienist will check to see that sealants are still in place. Sealants are most effective in reducing cavities in children. In fact, all children should have their molars (back teeth) evaluated for sealants soon after they erupt. For most children, this occurs approximately at ages 6 and 12. Sealants can also be useful in cutting down formation of decay in adult teeth, as well. An application of sealants is a preventative measure to keep teeth healthy. It is an effective way to reduce the need for fillings and more expensive treatments that may be required to repair the damage from cavities, so sealants can save our money. India exposes disparities in oral health, with lower income groups having higher disease rates, limited or no access to care. Dentist: Population ratio in the rural areas to be dismally low with less than 2% dentists being available for 72% of rural population.

Statistics present the grim reality, that 95% of the population in India suffers from gum disease, only 50% use a toothbrush and just 2% of the population visit the dentist. This sounded an alarm and the need for a blueprint, one that would be a tool for sustained effort. National Oral Health Programme was therefore initiated to accurately assess needs, monitors outcomes, decreases disparities, improves access to care and ultimately improves oral health.

National Oral Health Programme an initiative of the Indian Dental Association (IDA) affirms that oral health is essential to general health and well-being. This programme crystallizes IDA's aim for optimal oral health by 2020. This revolutionary programme addresses the 'silent epidemic of oral diseases, which aims

- Prevention of oral diseases in school children.
- Timely interception and treatment of oral diseases.
- Appropriate oral health care for rural population.

School health service is an important economical and powerful health care delivery to improve community health especially of future generations. It is comprehensive care of the health and well-being of children throughout the school years. The school health committee was constituted by the Government of India in 1960 to assess the standards of health and nutrition of school children and to suggest recommendations to improve them. As per recommendations of the committee the school health program was initiated in 1962 but minimum services are provided to the school children due to shortage of resources and insufficient facilities.

School going age is relatively safe from health point of view. Health problems of school children may vary with local health problems, cultural practices, socio economic status and available resources. Dental caries and dental diseases are common in school children.

Dental caries and periodontal disease are two common dental problems among school children. There should be provision of dental examination once a year to detect problems. Guidance for maintenance of dental hygiene and improvement of dental appearance should be emphasized during dental checkup. Improvement of dental health is a part of school health program. Fluoride is a mineral that is naturally present

in varying amounts in almost all foods and water supplies. Fluoride is also used in many consumer dental products such as toothpaste and fluoride mouth rinses. Fluoride acts in two ways: topically and systemically. Topical fluorides strengthen teeth that have already erupted into the mouth. As the fluoride washes over the tooth surface, it is incorporated into the outer surface of the tooth, making it more resistant to decay. Additionally, topical fluoride is used to protect and desensitize root surfaces by providing additional mineralization to the naturally occurring “softer” root surface.

Tooth eruption is completed during adolescence .Improper nutrition and inadequate cleansing promotes dental decay, which is the leading cause of mouth disease in adolescents. Gingivitis may also occur as a result of poor oral hygiene. Flossing and once a year visit to dentist should be continued during adolescence and into adult life. We may already be aware that daily brushing and flossing are the most important weapons against the formation of plaque, the primary cause of cavities. In addition to our regular routine of brushing and flossing, our dentist can apply a coat of plastic material – called a sealant – on the top or biting surfaces of our back teeth. This plastic coating creates a barrier on our teeth and seals out the decay-causing bacteria that live in plaque. The food and liquids we eat and drink combine with bacteria to produce a sticky film called plaque.

An adequate, well balanced diet, varied diet that promotes the general health of the child also promotes the oral health. The ingestion of sugar, particularly sucrose, provides the substrate for production of tooth destroying acid by the bacteria adhering to the teeth in plaque. Medications that contain sugar are best given at mealtimes, if food does not detract from their optimal effectiveness. If sugar containing medications must be given between meals, the child teeth should be cleaned or if that is not possible, the child mouth should be rinsed with water.

1.1 NEED FOR THE STUDY

Tooth decay is one of the most prevalent diseases affecting almost 100 percent of the total population. During adolescence most of the children have full set of permanent teeth. School age children become increasingly capable to take self care. They follow the values and belief and habits of the parents. Parents are still responsible for information giving and explaining physiologic changes that occur

during the school years. Anticipatory guidance is needed for parents and their children for maintenance and promotion of health.

A very extensive and comprehensive National Health Survey was conducted in 2004 throughout the entire country of India in order to ascertain the oral health status and prevalence of dental disease in representative age groups. The following percent prevalence of dental caries was reported for the various age groups examined, for both coronal and root surfaces:

51.9% in 5 year-old children

53.8% in 12 year-old children

63.1% in 15 year-old teenagers

Poor oral health is detrimental for children since it affects their nutrition, growth and development. Childhood oral disease, if untreated, leads to pain, development of dental facial anomalies and other serious health problems, such as severe toothache, dental abscess, destruction of bone, and spread of infection via the bloodstream. The social impact of oral diseases in children is very high. More than 51 million school hours are lost every year to dental-related illness. Poor children have almost 12 times more restricted activity days due to dental-related illness than children from higher-income families. Dental caries can affect a child's eating habits and nutritional intake, potentially influencing growth and early childhood development and school readiness. Pain and infection from dental caries leads to poor school attendance and problems in eating, speaking, and learning. Tooth decay or early loss of teeth may lead to malnutrition and other health problems. Caries and its complications affect the quality of life, both physically and physiologically. Premature loss of primary teeth can result in a variety of adverse consequences, such as gastro-intestinal disorders, esthetic and psychological problems. Early childhood caries may dramatically increase a child's risk for future dental caries.

During the school age years, when permanent teeth erupt, good dental health and regular attention of dental caries are vital parts of health supervision. During this period correct brushing techniques should be taught and reinforced. **Incidence of Children with Dental health problems according to W.H.O (2009) were India 1,300,000 USA 7,960,000 UK 1,970,000 Canada 1,330,000 and Japan 1,96,000.**

India, a developing country faces many challenges in rendering oral health needs. The majority of Indian population resides in rural areas, of which more than 40% constitute children. These children cannot avail dental facilities due to inaccessibility, financial constraints and stagnation of public dental healthcare services. This entails the health professional to adopt a more practical approach to achieve primary prevention of oral diseases. The most viable solution seems to be dental health education. Documented evidence shows that teachers and parents can augment dental health behavior. As with any other part of child's body, child's mouth needs to be cleaned regularly to keep it healthy, working properly and looking good. Research is now showing that the health of mouth affects the health of the rest of our body. If child's mouth is clean and healthy, the rest of his or her body will be better off too.

Oral hygiene needs to start early. This means taking action even before child gets his or her first tooth. Wipe child's tongue, gums and cheeks at least once a day, before bed or nap time, with a clean, damp washcloth wrapped around finger. Its best if can look into child's mouth while clean it. Lay our baby in a bassinette and stand behind his or her head as we use the wipe. As our child grows, sit down and have our child stand or kneel between our legs, facing away from us. Then, our child can tip his or her head back into our lap. While we are looking in our child's mouth, keep an eye out for anything that doesn't appear normal. This could be white or red spots in the mouth, bulges that we can't identify, or other changes. Ask our child's dentist about anything we see.

The Morbidity statistics of the regular School Health Program in the Tamil Nadu state 2012 has reported that nearly 45% of children have dental problems. Tooth caries, Gingivitis, Dental Mottling, Impacted Tooth, and Non Eruption of Tooth etc are few of the problems faced by school children. These dental diseases can best be prevented through early detection and primary prevention. It is proposed to conduct state wide screening camps by training of health functionaries and teachers and provide treatment to the affected children using qualified dentists at the school level itself. Students studying in rural schools from the class 3rd to 8th standard will be covered under the programme. A budget of Rs.250 Lakhs has been allocated for taking up this programme.

As high as 45 per cent of young children suffered from dental caries. Levels of awareness on oral hygiene and proper dental care were very low among residents in rural pockets. Consumption of cheap snacks, especially sticky foods, sugar candies, ice creams and even non-vegetarian food to an extent were all responsible for causing tooth decay among the children. Children would be given a toothbrush and toothpaste and trained on good oral hygiene practices. Our child's teeth don't touch each other when they first come out. There is space between them. But as our child grows, the back teeth will move into position against one another. This can occur as early as age 3 or as late as age 6. When these back teeth start touching each other, it's time to start flossing our child's teeth. Flossing is essential because toothbrush bristles cannot reach between the baby teeth. This makes the areas between teeth at high risk for cavities.

The most important time to clean our child's mouth is just before bedtime. While we sleep, saliva flow slows down and the mouth provides less protection against cavities than it does during the day. First, let our child brush his or her own teeth and enjoy this experience. Don't worry about how well he or she does it. Then brush our child's teeth a second time.

In many countries, a large number of children and parents have limited knowledge of the causes and prevention of the most common oral diseases. Similarly, the schoolteacher's oral health knowledge has also not been satisfactory. It is evident that cultural beliefs and social taboos play an important role in the perception of the causes of dental decay and gum diseases. In India, a very less percentage of mothers received proper advice on oral care of the children from dentists or health care workers. In many countries, the number of children brushing their teeth is very unsatisfactory including India.

The availability, affordability and quality of Fluoride tooth paste remains a major problem in many developing countries. Only a small proportion of population is using fluoridated toothpaste and moreover because of high concentration of fluoride in drinking water in certain parts of India, also has a prohibiting effect as use of fluoride toothpaste. The high prevalence of Dental Caries has been brought under control in many developed countries during the last three decades. This was possible only through community or school based organized primary preventive programmes

essentially composed of generation of oral health awareness through education of the public and school children at large.

At the global level, approximately 80% of children attend primary schools and 60% complete at least four years of education, with wide variation between countries and gender. Children spend considerable period of their lifetime in the school right from their childhood to adolescence. This period has a special importance in their growing age as they are particularly receptive during this phase. They can be nurtured well for the general and oral health and the saying “catch them young” can very well be implemented. Schools can provide a supportive environment for promoting oral health and they can also be extremely helpful in spreading the right message to the local community. The school personnel and School children can pass the oral health promotion messages to the family members which can be beneficial in health promotion activities. When I went school health programme I found many children with dental problem. This incident make interested me to conduct this study.

1.2 STATEMENT OF THE PROBLEM

A study to evaluate the Effectiveness of Video Assisted Instructions on Knowledge and Practice Regarding Dental Health among Early Adolescents in Selected School at Madurai.

1.3 OBJECTIVES OF THE STUDY

1. To assess the pretest level of dental health knowledge and practice among Early adolescents
2. To evaluate the effectiveness of video assisted instructions on knowledge and practice regarding dental health among early adolescents
3. To correlate the relationship between dental health knowledge and practice
4. To associate the post test knowledge and practice regarding dental health with selected Demographic variables.

1.4 HYPOTHESES

- H1:** There will be significant difference between pretest and Post test dental health knowledge and practice score
- H2:** There will be significant association between Post test knowledge scores and selected demographic variables.

1.5 OPERATIONAL DEFINITIONS

Effectiveness:

It refers to the impact of video assisted instruction on knowledge and practice of students regarding dental health of early adolescents as revealed by statistically significant difference between pre test and post test knowledge score.

Video Assisted Instruction:

It refers to the systematically developed teaching method through moving picture and pamphlet, and handout designed for school children to provide information regarding dental health.

Knowledge:

It refers to the awareness of early adolescents regarding dental health as measured by the self administered knowledge questionnaire.

Practice:

It refers to selected early adolescents acceptable behavior towards teeth cleaning and maintaining dental health as measured by the self administered practice questionnaire.

Dental Health:

It refers the practice of keeping the mouth, teeth, and gums clean and healthy to prevent oral diseases, as by regular brushing and flossing and regular consultation with dentist.

Early Adolescents:

It refers to the age group of children between 11 -14 years

Selected School:

It refers to Sri Gopalakrishna Higher secondary School Siruthur Madurai 14.

1.6 ASSUMPTIONS

1. The dental caries is common among early adolescents
2. Video assisted instruction regarding dental health may help to gain dental health knowledge and practice in the prevention of Dental problems.

1.7 DELIMITATION

1. The study is limited to only early adolescents studying at Sri Gopalakrishna Higher Secondary School Madurai.
2. This study is restricted within short period of the time (4 weeks) only.

1.8 PROJECTED OUT COME:

The findings of the study will

1. Reveal the level of knowledge of early adolescents regarding dental health.
2. Improve the knowledge level and practice of early adolescents regarding dental health.

*Review of
Literature*

CHAPTER-II

REVIEW OF LITERATURE

The review of literature entails the systematic identification, reflection, critical analysis and reporting of existing information in relation to the problem. The purpose of review of literature is to obtain comprehensive knowledge and in-depth information about effectiveness of video assisted instructions in improving knowledge and practice of dental health among early adolescents in schools.

The section has Two Parts:

Part -A : Review of Literature

Part – B : Conceptual frame work

Part - A: Review of Literature

The literatures gathered from extensive review of electronic media were depicted under the following headings.

- 2.1 Literature reviews related to prevalence of dental problems among School children
- 2.2 Literature reviews related to dental health practices of school children
- 2.3 Literature reviews related to effectiveness on health education Regarding dental health among school children

2.1 LITERATURE REVIEWS RELATED TO PREVALENCE OF DENTAL PROBLEMS AMONG SCHOOL CHILDREN

Jaghasi I, Hatahet W, Dashash M. (2011) Conducted study about Dietary patterns and oral health in 504 school children of 6-12 years from Damascus. Dental health was evaluated by gingival index and presence of untreated dental caries. Consumption of sugars was high than food High sugar consumption (OR 5.26), low consumption of food (OR 2.45) and poor oral hygiene (OR 2.98) leads to dental caries. Author recommended to give health education to the children regarding good diet habits.

Princess Salma (2010) performed a school-based cross-sectional study on dental hygiene. Each sample evaluated by oral health practices. The results showed that nearly one fourth of the children brush their teeth twice or more daily. 17% of the schoolchildren never brush their teeth at all. There is a higher proportion, 22.1%, of rural children that never brush their teeth compared to 14.6% of the urban students. Dental flossing among primary schoolchildren in Mafraq Governorate is very rare: 97.2% of the children stated that they had never used dental floss in their life. Furthermore, one fourth of the schoolchildren did not have a tooth brush. While 15.0% of them have a shared toothbrush with their families. The findings of this study indicate that oral health habits in Mafraq Governorate are poor and need to be improved.

Gathecha et.al, (2010) conducted a cross-sectional study regarding Dental caries and oral health practices among 12 year old children in Nairobi. Study conducted with 639 school children. Dental health knowledge and practices were assessed. Dental caries was measured using the Decayed, Missing, Filled Teeth (DMFT) index. Dental carries prevalence is 37.5%. The school health policy should be used to promote oral health by provision of oral health instructions and highlighting harmful dietary practices. Preventive practices such as regular dental checkups should be advocated and promoted in schools.

Shekar C et.al, (2010) conducted a school-based cross-sectional study regarding dental caries. 6 Th and 9 Th class students are participated. Dental caries and dental flurosis were noted. There was a negative correlation between dental caries and fluoride concentration for the entire study population. However, in high fluoride areas, there was a positive correlation between fluoride concentration and dental caries. Water defluoridation on an urgent basis is a priority here than water fluoridation, because the prevalence and severity of dental flurosis is very high.

Shankar S et.al, (2010) Conducted Comparison of def index with Nyvad's new caries diagnostic criteria among three to six years old children in a school at Bangalore city. A total of 249 were participated. Children teeth were cleaned and dried with cotton rolls and chip blower. The dental caries were assessed .The diagnostic criteria used were deft and d, e, and f component of Nyvad's new caries diagnostic criteria. Mann Whitney 'U' test was used to compare the two indexes at 5% significant level. The mean value for deft was 2.48 and the mean for d, e, and f component of Nyvad's new caries diagnostic criteria was 3.18 which shows statistically significant difference with P value of <0.05. And concluded Nyvad's new caries diagnostic criteria produces values much higher than those with def caries index system. Concluded Nyvad's new caries diagnostic criteria can be used to diagnose dental caries.

Molina-Frechero N, (2009) conducted a cross-sectional study to determine the sources of fluoride exposure and the prevalence and severity of fluorosis and dental caries and sources of fluoride exposure in the permanent dentition of 11-year-old children. Children had a fluorosis prevalence of 52.73% .The caries prevalence was 53.2% .Fluorosis prevalence was high for low levels and low for more severe levels. Dental caries was low with a predominance of tooth decay. Exposure to different sources of fluoride was a risk factor for the development of fluorosis and a benefit with regard to dental caries.

Kohlboeck G, et.al, (2009) conducted study to assess the relationship of hyperactivity and poor oral health.1, 126 children were participated in the study. During the dental examination, oral hygiene, non-cavitated and cavitated caries Lessons, dental trauma, and enamel hypo mineralization in the permanent dentition were assessed. Children with borderline and abnormal value of hyperactivity

inattention symptoms showed more non-cavitated caries Lessons. Severe levels of hyperactivity/inattention may contribute to a higher risk for dental problems.

Kandel EA, et.al, (2008) conducted a cross-sectional study regarding dental caries 3,488 children aged 5 to 13 years who participated. Untreated caries was reported in 33% of children. significant risk factors for having untreated caries were living in the metropolitan, and not having had a dental visit in the previous 3 years and not having any form of dental insurance and concluded Untreated caries in elementary school children is prevalent .The researcher suggest that additional family and community preventive initiatives are needed to reduce the development of childhood caries.

Hooley M et.al, (2008) Conducted longitudinal study to identify the relationship between eating practices and dental carries .Overweight/obesity was associated with sweet drink consumption and dental problems. Both underweight and overweight at age 6-7 years predicted dental problems at age 8-9 years. Dental caries and body weight are influenced by diet. Overweight children may be consuming less fatty food but appear to be consuming more sweet drinks than normal-weight children, which can lead to both increased weight and dental caries. Dietary interventions designed to reduce the development of dental caries may also reduce the development and maintenance of overweight.

Shakya P et.al, (2007) conducted a comparative study between 5 - 6 years and 12 - 13 years age group of school children to find out prevalence dental carries A stratified cluster sampling was done. Decayed, missed and filled teeth index and decayed, missed and filled surfaces index were used as the standard tools for the determination of prevalence. Results: A total of 638 students (325 of age group 12 - 13 years and 313 of age group 5 - 6 years) from 30 different schools. The caries status was found higher in the age group of 5 - 6 years than in the 12 - 13 years and it was found to be statistically significant ($p < 0.001$).

2.2 LITERATURE REVIEWS RELATED TO DENTAL HEALTH PRACTICES OF SCHOOL CHILDREN

Mehta A, Kaur G. (2012) Conducted study on Oral health-related knowledge, attitude, and practices among 12-year-old schoolchildren studying in rural areas .440 children (216 males and 224 females) from 12 schools were participated. Only 25% of the participants were cleaned their teeth more than once in a day. 32% were did not clean their teeth daily. 45.5% of the children having dental problem and only 35.9% visited the dentist. Based upon the findings of the present study, the knowledge, attitude, and practices of the surveyed children with regard to oral health is poor. Author recommended regular oral health education of the children, as well as their parents and school teachers.

Singh A, Bharathi MP, Sequeira P, Acharya S, Bhat M. . (2011) Conducted study on Oral health status and practices of 5 and 12 year old Indian tribal children. A total of 418, 5-year-old children and 327, 12-year-old children were participated. None of the children had visited the dentist. Dental fluorosis prevalence in 5- and 12-year olds was 11.9% and 22.9% respectively. Research reveals high sugar consumption, dental fluorosis, poor oral hygiene, and untreated dental disease of tribal children. Author recommended the implementation of preventive programs including restriction of sweets in school premises for the tribal children is the key to better oral health.

Singh A, Sequiera P, Acharya S, Bhat M. (2010) conducted a comparative study about Oral health status of two 12-year-old socially disadvantaged groups in South India. A total of 327 Ashram schools, and 340 government schools children were selected for comparison from other. Oral hygiene practices, dental fluorosis, periodontal status, dentition status and dentofacial anomalies were assessed and compared. Dental fluorosis was detected in 22.9% children from Ashram schools, whereas in the comparison group 14.4% children had dental fluorosis. No significant differences were noted between two groups with respect to Dental Aesthetic Index scores.

Purohit BM, Acharya S, Bhat M. (2010) conducted a comparative study on Oral health status and treatment needs of children attending special schools in South India. 265 children with SHCN were compared to 310 healthy children to assess differences in periodontal status, dentition status, treatment needs, and dental facial anomalies using the WHO criteria. ($P \leq 0.05$). A significantly higher prevalence of caries (89.1%), malocclusion, and poorer periodontal status was observed among children with SHCN compared to the healthy control group. Author recommended improving the oral health of these children will require maintaining good oral hygiene practices.

Amin TT, Al-Abad BM. (2008) Performed a cross-sectional descriptive study on Oral hygiene practices, dental knowledge, dietary habits and their relation to caries among male primary school children in Saudi Arabia. 1115 males selected by multistage random sample. The decayed tooth was diagnosed in 68.9% of the included children, more in urban and younger students. Caries affected the subjects consumed cariogenic foods at greater frequency compared with caries-free children. Only 24.5% of the students brushed their teeth twice or more per day, and 29% of them never received instructions regarding oral hygiene practices. The poor oral hygiene practices, lack of parental guidance are the main risk factors for dental decay among the surveyed students.

Harikiran AG, et.al, (2008) conducted a study on Oral health-related KAP among 11- to 12-year-old Bangalore school children. 212 children (Male: 108; Female; 104) were participated.. Data on oral health KAP were collected by means of a self-administered questionnaire. Only 38.5% of the children brush their teeth two or more times a day. High proportion of study participants reported having hidden sugar at least once a day: soft drinks (32.1%), milk with sugar (65.9%), and tea with sugar (56.1%). Researcher conveyed that oral health KAP of Bangalore School are poor and needs to be improved.

Rajab LD, Petersen PE, Bakaeen G, Hamdan MA. (2008) conducted cross sectional study On Oral health behaviour of schoolchildren and parents in Jordan. 80% of the parents knew about the harmful effect of sugar and 79% thought that poor oral hygiene may induce dental caries. In addition to proper oral hygiene (79%) and restriction of sugar/sweets (42%), 36% of the parents emphasized regular dental visits

for the prevention of dental disease in children. However, most children visited a dentist for symptomatic reasons only (86%), while 11% attended for dental check-ups. Tooth brushing at least twice a day was reported for 31% of the children. The discrepancy between dental knowledge and attitudes of parents and oral health care practices indicate the need for oral health education. School-based oral health promotion programmes should be established.

Vakani F, Basaria N, Katpar S (2008) performed a Cross-sectional study on Oral hygiene KAP assessment and DMFT scoring among children aged 11-12 years in an urban school of Karachi. Purposive sample comprising 300 students of grade 6 within the age group of 11-12 years was selected. P-value of < 0.001 was considered significant. There were 160 males and 140 females in the target group. The mean DMFT was found to be 1.27. The children had satisfactory knowledge of oral health's effect on general health and the problems associated with poor dental hygiene. However, 50.3% children did not have positive attitude towards importance of a dentist's role in maintaining their dental health. Only a few students (11.3%) had familiarity with dental floss. The attitude of school children towards dental health and dental service utilization is determined by certain social and cultural factors.

Liu M, Zhu L, Zhang B, Petersen PE (2005) conducted a cross-sectional study on Changing use and knowledge of fluoride toothpaste by schoolchildren, parents and schoolteachers in Beijing, China. 1,557 schoolchildren, 1,132 parents, and 352 schoolteachers were recruited by multistage stratified sampling procedure and used Self-completed questionnaire. The percentage of schoolchildren, parents, and schoolteachers who actually used fluoride toothpaste was 88%, 86%, and 87%, respectively, and 74-78% of the respondent groups brushed their teeth twice a day or more. 64% of schoolchildren, 73% of parents, and 74% of schoolteachers confirmed the caries preventive effect of fluoride toothpaste.

Jiang H, Petersen PE, Peng B, Tai B, Bian Z. (2005) conducted a cross-sectional survey On Self-assessed dental health, oral health practices, and general health behaviours in Chinese urban adolescents. 2662 adolescents were participated. The multistage cluster sampling and covered three age groups: 11, 13, and 15 years. Self-assessment of dental health of Chinese adolescents was generally good, only 12% of the students answered that their teeth were "poor" or "very poor" and 9%

claimed having "poor" or "very poor" gums. 11% percent of participants said that other students made fun of their teeth; 24% of the respondents were dissatisfied with the appearance of their teeth, and 41% claimed that they had experienced toothache or symptoms during the previous 12 months. Positive attitudes towards dental care were found in all age groups; 67% of adolescents brushed their teeth at least twice a day and 48% of the students used fluoridated toothpaste. Only 26% of the students visited a dentist during the previous 12 months. In all, 6% of the adolescents had tried cigarette smoking at least once, while 41% reported having tasted alcohol drink.

2.3 LITERATURE REVIEWS RELATED TO EFFECTIVENESS ON HEALTH EDUCATION REGARDING DENTAL HEALTH AMONG SCHOOL CHILDREN

Biesbrock AR, Walters PA, Bartizek RD. (2012) were performed a study on Short-term impact of a national dental education program on children's oral health and knowledge. The educational program focused on the gingival health (gingivitis and plaque) of participating children who were between the ages of six and 15. The multi-week program taught the participants the basics of oral biology and disease, as well as proper oral health prevention, including oral hygiene, dietary modification, and the importance of visiting the dentist. Mean baseline GI score was 0.184, while the four week mean GI score was reduced to 0.140. This represents a 24% reduction in GI score, with $p < 0.001$. Collectively, these data support the role of an educational program in promoting improved oral health in these children over a four-week period.

D'Cruz A, Aradhya S. (2012) conducted a experimental study On Impact of oral health education on oral hygiene knowledge, practices, plaque control and gingival health of 13- to 15-year-old school children in Bangalore city. Three schools were randomly selected. At baseline, a 20-item questionnaire was used to assess the oral hygiene knowledge and practices. For experimental groups I (lecture using a PowerPoint presentation) and II (lecture using a Power Point presentation with tooth brushing demonstration). Control group did not receive any intervention. Active involvement of school children with reinforcement of OHE can improve oral hygiene knowledge, practices and gingival health and decrease plaque levels.

Muralidharan D, Fareed N, Shanthi M. (2010) conducted a longitudinal institution based interventional study on Comprehensive dental health care program at an orphanage in Andhra Pradesh. the primary grade children (n=162). Baseline data collection included (i) basic demographic data (ii) body mass index (BMI) (iii) assessment of the dentition status and treatment needs according to WHO 1997 criteria. The CDHP included group based dental health education, professional oral prophylaxis, weekly (0.2%) sodium fluoride mouth rinse program, biannual application of topical fluoride (1.23% APF), pit and fissure sealants for all first permanent molars and provision of all necessary curative services. Mean treatment requirements per child decreased at 18 months. New caries Lesions developed among four children. BMI of children with decay was seen to improve significantly after instituting the CDHP. Concluded CDHP is effective in overall improvement of general and oral health.

Goel P, Sehgal M, Mittal R. (2010) were conducted study on evaluating the effectiveness of school-based dental health education program among children of different socioeconomic groups. The investigators made a visit to three different schools and studied 500 children. A ten items, open-ended, self-administered questionnaire was pretested on the primary and higher primary school children before and after an educational intervention. A second visit was made to one of the schools 1 year later and the same questionnaire was re-administered to those subjects who had participated in the original study. Results showed that although educational intervention was successful in improving the Dental health awareness of most children, the socioeconomic background is an important determinant for the same.

Gill P, Stewart K, Chetcuti D, Chestnutt IG (2010) conducted a qualitative study on Children's understanding of and motivations for tooth brushing. Individual semi-structured interviews were conducted with 66 children aged 6-7 years and 10-11 years in four purposively selected primary schools in UK. Data were analysed using a constructive process of Thematic Content Analysis and techniques of open and selective coding. This study has revealed information that is of value in directing oral health education messages, oral health promotion programmes and has identified issues that potentially affect compliance with tooth brushing that merit further investigation.

Saied-Moallemi Z, Virtanen JI, Vehkalahti MM, Tehrani A, and Murtomaa (2009) conducted a community trial on School-based intervention. The first group of children received intervention via class work, solving a set of puzzles containing oral health messages, under supervision of their health counsellor. The second group intervention via parents, included an oral health education leaflet and a brushing diary for supervising the child's tooth-brushing; the third group received a combination of both these interventions. The control group had no intervention. The GEE models confirmed a strong intervention effect on healthy gingival in both groups where parents were involved.

Tai BJ, Jiang H, Du MQ, Peng B. (2008) was conducted study on assessing the effectiveness of a school-based oral health promotion programme in China. Seven intervention schools and eight control schools were randomly selected from one district by stratified cluster sampling. The study was conducted as a 3-year follow-up study. After 3 years, 661 children remained in the intervention group and 697 children in the control group. The 3-year net mean DMFS increment score was 0.22 in the intervention schools and 0.35 in the control schools ($P < 0.013$). More children in the intervention schools adopted regular oral health behavioural practices such as brushing their teeth at least twice a day, visiting the dentist within the past calendar year, and using fluoride toothpaste. The study suggests that the school-based oral health promotion was an effective way to reduce new caries incidence, improve oral hygiene and establish positive oral health behavioural practices in the targeted schoolchildren.

Kowash MB, Toumba KJ, Curzon ME. (2005) was performed a study on Cost-effectiveness of a long-term dental health education program for the prevention of early childhood caries. The data collected over a three year period in a dental health education programme, The cavities saved over the three year period indicated a B/C ratio for the DHE of 5.21 compared with SRFD of 4.17; CWF of 1.15 and FSP of 0.42. The C/E results were 1.92, 2.40, 8.66 and 23.74 respectively. A dental health education program of home visits with mothers of young infants to prevent early childhood caries and starting at 8 months of age, gave better benefit-costs and costs effectiveness ratios than other preventive programs.

Shenoy RP, Sequeira PS. (2005) Were conducted study on Effectiveness of a school dental education program in improving oral health knowledge and oral hygiene practices and status of 12- to 13-year-old school children. 36-week duration study assessed the effectiveness of school DHE conducted every three weeks against every six weeks on oral health knowledge, practices, oral hygiene status and gingival health of 415, 12- to 13-year-old schoolchildren belonging to social classes I and V. The DHE program conducted at three-week intervals was more effective than that conducted at six-week intervals in improving oral health knowledge, practices, oral hygiene status, and gingival health of schoolchildren.

Worthington HV et.al, (2004) conducted a cluster randomized controlled trial of a dental health education program for 10-year-old children .Thirty-two primary schools in the northwest of England participated. After a baseline assessment of plaque and the completion of a dental knowledge questionnaire by the children, the schools were allocated randomly to active or control groups. The active groups had 20 percent and 17 percent lower mean plaque scores than the control group at four and seven months ($P < .001$). The children receiving the program had significantly lower mean plaque scores and greater knowledge about toothbrushes and disclosing tablets than the control children who had not received the program.

Part – B

2.4 CONCEPTUAL FRAMEWORK

The conceptual framework for research study serves as a measure on which the purpose of the study is based. It also serves as a springboard for theory development. The framework provides the prospective from which the researcher views the problem under investigation.

This study was based on the concept that video assisted instructions improve the level knowledge and practice regarding dental health among early adolescents. The investigator adopted the Wiedenbach's Helping Art of Clinical Nursing theory (1964) as a base for developing the conceptual framework. This theory directs an action towards an explicit goal. It has three factors

1. Central purpose
2. Prescription
3. Realities

1. Central purpose

It refers to what the nurse wants to accomplish. It is the goal towards which a nurse strives. In this study the main central purpose is to assess the effectiveness of video assisted instructions in improves the level knowledge and practice regarding dental health among early adolescents.

2. Prescriptions

It refers to plan a care for a patient. It will specify the nature of action that will fulfill the nurse's central purpose. In this study the investigator plans to provide video assisted instructions regarding dental health for 30 minutes to early adolescents in school, and assess for the improvement of knowledge and practice regarding dental health.

3. Realities:

It refers to the physical, physiological, emotional and spiritual factors that affect the nursing action. The five realities identified by Wiedenbach's theory are agent, recipient, goal, means and activities and framework.

- **Agent:** Investigator
- **Recipient:** Early adolescents who are studying in this school.
- **Goal:** Improvement of knowledge and practice regarding dental health
- **Means:**
 - To assess the level of knowledge and practice regarding dental health among early adolescents by means of pre test questionnaire
 - To administer video assisted instructions regarding dental health
 - To assess the effectiveness of video assisted instructions regarding dental health by means of post test questionnaire
 - Facility – Sri Gopalakrishna Higher Secondary School Siruthur Madurai.

The conceptualization of nursing practice according to this theory consists of 3 steps as follows

Step-1: Identifying the need for help.

Step-2: Ministering the needed help.

Step-3: Validating the help.

Step: 1 identifying the need for help

This step involves determining the need for help. Assess the level of knowledge and practice regarding dental health among early adolescents by means of pre test questionnaire.

Step: 2 ministering the needed help.

This step involves provision of required help for identified need. It has two components

(i) Prescription:

In this study the investigator plans to provide video assisted instructions regarding dental health for 30 minutes to early adolescents in school, and assess for the improvement of knowledge and practice regarding dental health.

(ii) Realities: In this study, the five realities identified by Weidenbach theory

- **Agent:** Investigator
- **Recipient:** Early adolescents who are studying in school
- **Goal:** Improvement of knowledge and practice regarding dental health
Among early adolescents
- **Means:**
 - To assess the level of knowledge and practice regarding dental health among early adolescents by means of pre test questionnaire
 - To administer video assisted instructions regarding dental health
 - To assess the effectiveness of video assisted instructions regarding dental health by means of post test questionnaire
 - Facility – Sri Gopalakrishna Higher Secondary School Siruthur Madurai.

Step: 3 validating that the need for help was met.

The nurse validates the ministered help. It is accomplished by means of post test assessment of dental health knowledge and practice after rendering nursing intervention that is, providing video assisted instructions regarding dental health.

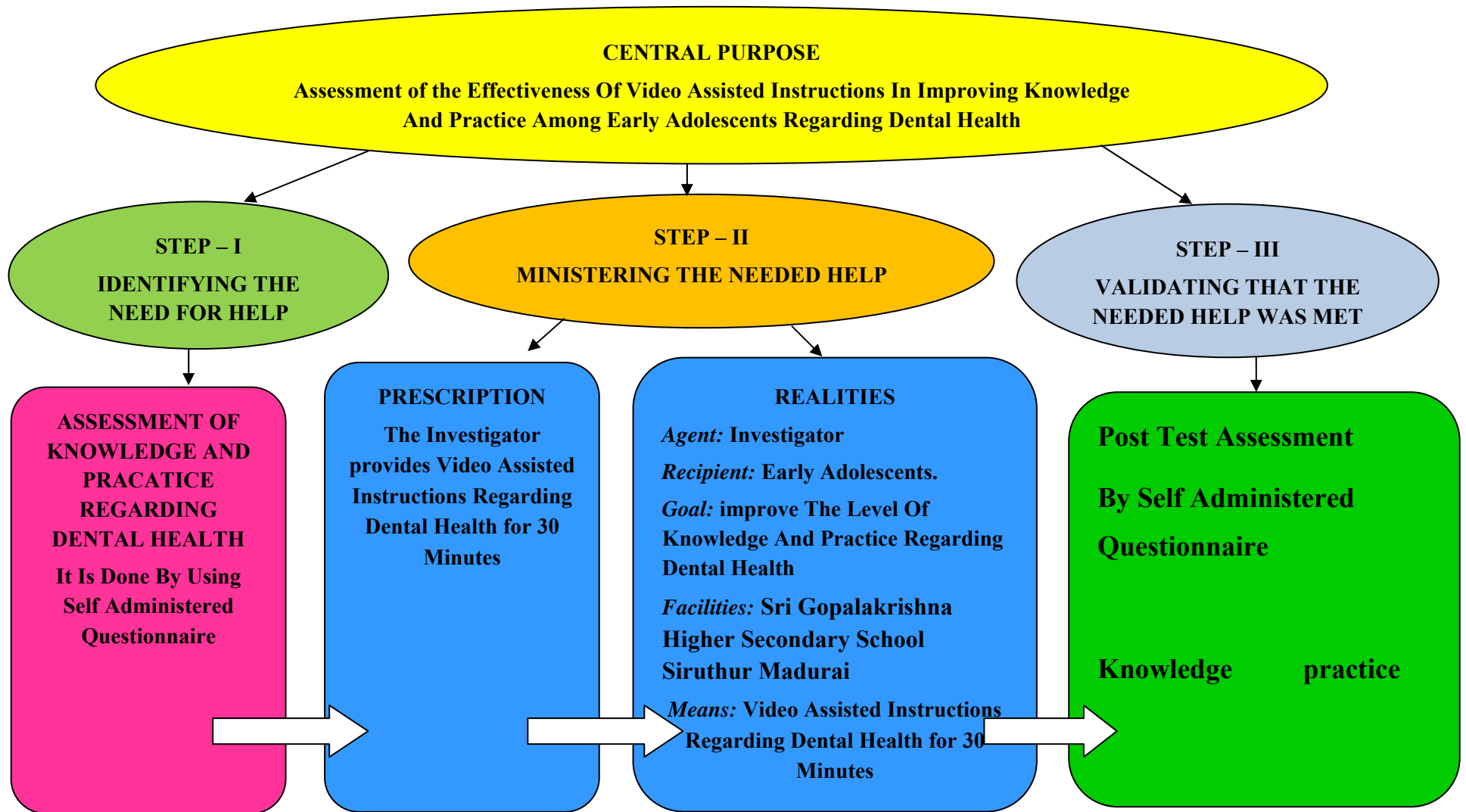


Fig.1 MODIFIED WIEDENBACH'HELPNG ART OF CLINICAL NURSING

Methodology

CHAPTER-III

RESEARCH METHODOLOGY

This chapter deals with the Methodology to Effectiveness of Video Assisted Instructions on Knowledge and Practice Regarding Dental Health among Early Adolescents in Selected School Madurai.

Research Methodology includes the Research Design, Variables of the Study, Setting, Population, Sample, and Criteria for Sample Selection, Sampling Technique, Sample Size, Description of the Tool and Scoring Method, Content Validity, Pilot Study, Procedure for Data Collection, Plan for Statistical Analysis, Protection Of Human Subjects And Schematic Representation Of The Study.

3.1 RESEARCH DESIGN

The research design used in this study was

PRE EXPERIMENTAL DESIGN

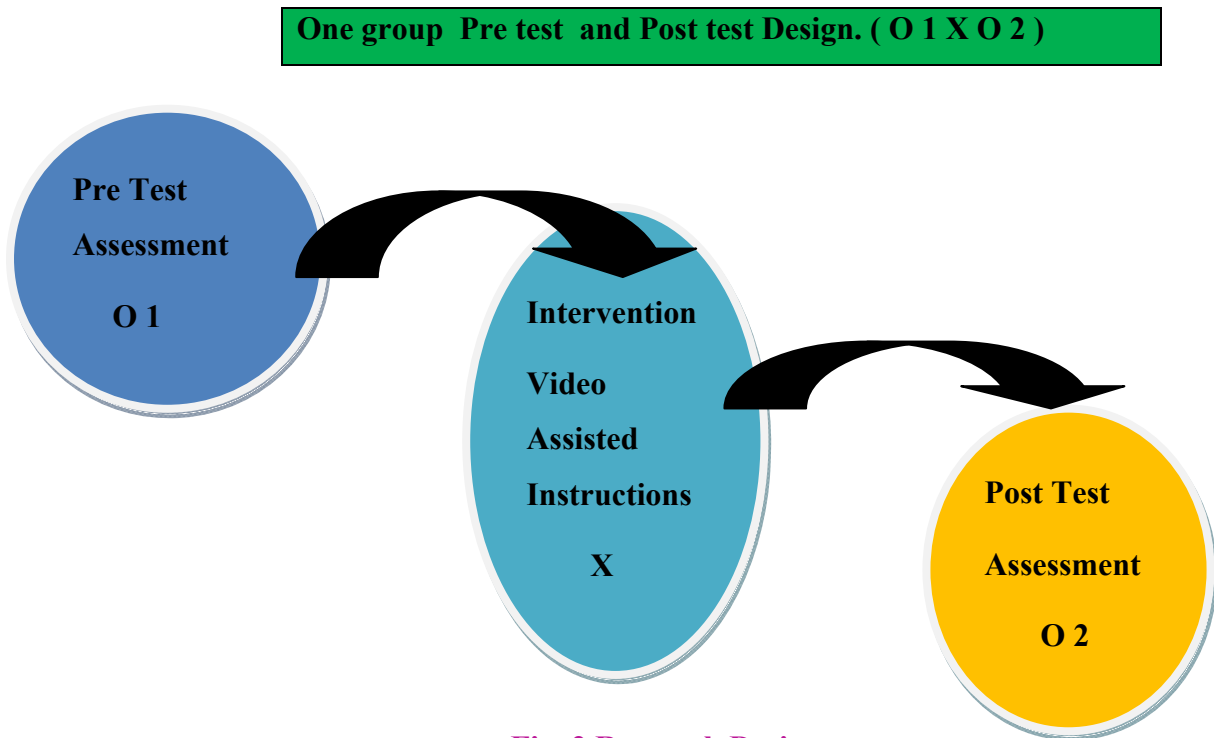


Fig. 2 Research Design

3.2 VARIABLES

Independent variable

Video Assisted Instructions Regarding Dental Health

Dependent variable

Knowledge and Practice Regarding Dental Health

3.3 SETTING OF THE STUDY

The study was conducted at Sri Gopalakrishna Higher Secondary School Siruthur Madurai 14. Total census of the school is 810 students. Early adolescents (VI Std –IX Std) are 120 students each class having 30 students.

3.4 POPULATION

Target population

All early adolescents

Accessible population

Early adolescents studying at Sri Gopalakrishna Higher Secondary School Siruthur Madurai 14

3.5 SAMPLE

The study sample comprised of early adolescents studying at Sri Gopalakrishna Higher Secondary School Siruthur Madurai 14 and fulfilled the criteria for sample selection

3.6 SAMPLING TECHNIQUE

Sample refers to the process of selecting a portion of the population which refers the entire population. The subjects were selected using Purposive sampling based on criteria for sample selection.

3.7 SAMPLE SIZE

The sample size of the study was 60.

3.8 CRITERIA FOR SELECTION OF SAMPLES

Inclusion criteria

1. Early adolescents who are willing to participate.
2. Early adolescents who are studying at Sri Gopalakrishna Higher Secondary School Siruthur Madurai
3. Both Male and Female students will be included in this study.

Exclusion Criteria

1. The students who are less than 11 years and more than 14 years
2. Students not available on the day of study

3.9 RESEARCH TOOL

The tool was developed and standardized from extensive review of literature, internet search and discussion with experts.

3.9.1. Description of the tool

The tool consisted of three sections.

Section – A

Demographic Data

It included the student's Age in years, Gender, Religion, Educational status of parent, Occupation of parents, Income in rupees per month, Type of family, Area of living and food habits and type of drinking water.

Section – B

Knowledge Regarding Dental Health

(10 questions each correct answer carry 1 mark)

Scoring procedure

Score	Level of Knowledge
0-2	Very Poor Knowledge
2-4	Poor Knowledge
4-6	Average Knowledge
6-8	Good Knowledge
8-10	Excellent Knowledge

Section C

Practice Regarding Dental Health

(10 Questions each good practice carry 1 mark)

Scoring Procedure

Score	Level of Practice
0-2	Very Poor Practice
2-4	Poor Practice
4-6	Average Practice
6-8	Good Practice
8-10	Excellent Practice

3.9.2. Testing of Tool

Content Validity

The content validity was obtained from three Child Health Nursing experts and one Professor of child health department and one professor of dental department at various institutions. Experts' suggestions were incorporated in the tool.

Reliability

The knowledge and practice tool reliability was assessed by split half method ($r=0.86$ and 0.87 respectively). The reliability test score shows there is a stability and consistency in the tool items. Hence the tool was considered highly reliable for proceeding with the main study.

3.10 PILOT STUDY

A formal permission was obtained from Institutional Review Board / Independent Ethical Committee of Government Rajaji Hospital, Madurai-20 and Correspondent and Head Mistress of Sri Gopalakrishna Higher Secondary School Siruthur Madurai.

The pilot study was conducted at above school for a period of 7 days from 01-08-2012 to 07-08-2012. About 10 students were selected using Purposive sampling. The results showed significant in improving the knowledge and practice regarding dental health among early adolescents .The study was practically feasible to be conducted with a large sample size.

3.11 PROCEDURE FOR DATA COLLECTION

After obtaining the formal permission from Institutional Review Board Independent ethical Committee of Government Rajaji Hospital, Madurai-20 and Correspondent and Head Mistress of Sri Gopalakrishna Higher Secondary School Siruthur Madurai. The data collection was done for a period of 4 weeks. Rapport was established with students after a brief introduction about the study and its purpose. The written consent was obtained from the students after fully explaining the procedure of the study.

Based on the criteria for sample selection, the students for the study were selected using Purposive sampling. **Day one to Day four** Pre test assessment was done to evaluate the level of knowledge and practice of early adolescents regarding dental health.

Day Ten Video assisted instructions regarding dental health were given by video, pamphlet, and Handout. Brushing And Flossing of teeth was explained with model.

Then **Day seventeen**, post test assessment was done. The investigator followed all ethical principles for collecting the data.

Articles Required;

- Video
- Dental Model
- Lesson plan
- Tooth Brush

3.12 PLAN FOR DATA ANALYSIS

The analysis of data was done by following methods

Descriptive statistics

1. Demographic variables of the clients were analyzed using frequency and percentage distribution.

2. Mean and standard deviation were used to analyze changes in the level of knowledge and practice

Inferential statistics

1. Student t-test was used to determine the Effectiveness of Video Assisted Instructions Regarding Dental Health.
2. Chi- square test was used to find out the association between the level of knowledge and practice regarding dental health and selected demographic variables
3. Karl-Pearson Correlation was used to find out the correlation between Dental health knowledge and practice.

3.13 PROTECTION OF HUMAN SUBJECTS

The research proposal was approved by the experts of the Dissertation Committee of College of Nursing, Madurai Medical College, Madurai and the same was approved by Institutional Review Board / Independent Ethical Committee of Government, Rajaji Hospital, Madurai-20 for conducting the pilot study and main study. The permission for the pilot study and main study were also obtained from the Correspondent and Head Mistress of Sri Gopalakrishna Higher Secondary School Siruthur Madurai. An informed consent was obtained from the each study subject before starting the data collection. Confidentiality and privacy was maintained throughout the study.

3.14 SCHEMATIC REPRESENTATION OF THE STUDY

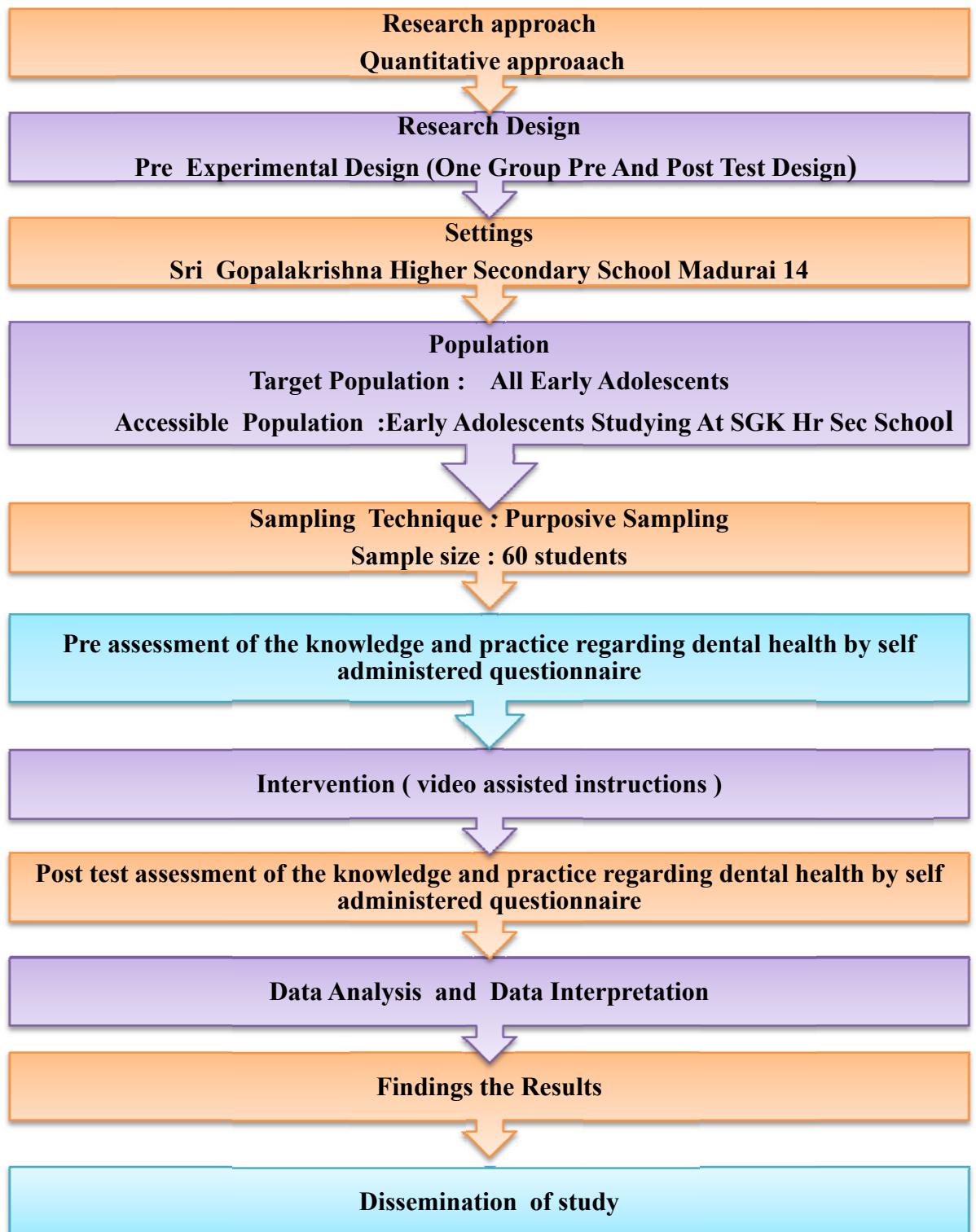


Fig. 3 Schematic Representation of the Study

*Data Analysis
And
Interpretation*

CHAPTER-IV

DATA ANALYSIS AND INTERPRETATION

This chapter deals with analysis and interpretation of data collected from 60 subjects to assess the Effectiveness Video Assisted Instructions On Knowledge And Practice Regarding Dental Health Among Early Adolescents In Selected of Sri Gopalakrishna Higher Secondary School Siruthur Madurai.

4.1 ORGANIZATION OF THE DATA

The analysis and interpretation of data was organized under the following sections.

SECTION A: Distribution on demographic variables of students.

SECTION B: Evaluate the Effectiveness of video assisted instructions on Knowledge and Practice regarding dental health.

SECTION C: Correlation between dental health knowledge and practice.

SECTION D: Association of post test dental health knowledge and practice level with demographic variables.

SECTION A

Distribution of demographic variables of students

TABLE 1

Frequency and percentage wise distribution of students according to demographic variables (n=60)

Topic	Demographic variables	Frequency	Percentage
Gender:	Male	49	82
	Female	11	18
Age(in years):	11	14	23
	12	13	22
	13	18	30
	14	15	25
Religion:	Hindu	47	79
	Christian	6	10
	Muslim	2	3
	Others	5	8
Education of parents:	Non formal Education	13	22
	Primary	21	35
	Secondary	19	32
	Collegiate	7	11
Occupation of parents:	Unemployed	8	13
	Daily wages	26	43
	Private employee	19	32
	Govt. employee	7	12
Monthly income of parents :	Less than 1000	43	71
	Rs 1001-5000	9	15
	Rs5001-10000	7	12
	More than Rs.10000	1	2
Type of family:	Nuclear family	27	45
	Joint family	28	47
	Extended family	4	7
	Single parent family	1	2

Topic	Demographic variables	Frequency	Percentage
Food habit:	Vegetarian	19	32
	Non Vegetarian	19	32
	Natural diet	18	29
	Fast food	4	7
Living place:	Village	38	63
	Town panchayat	4	7
	Town	9	15
	Corporation	9	15
Source of drinking water:	Well	3	5
	Lake	9	15
	Tap Water	44	73
	Osmosis Filter water	4	7

Above table shows that 49 male and 11 female students were participated in the study. 14 students were 11 years old, 13 were 12 years, 18 were 13 years and 15 were 14 years old. Among them 47 belongs to Hindu religion and 6 were Christian and 2 Muslim and 5 belongs to other religion. 13 students parents educational qualification were non formal education and 21 were primary education, 19 were completed secondary school education. 7 were collegiate.

8 students were unemployed, 26 were daily wages 19 were private employee and 7 were government employee. 43 students parents monthly income were less than 1000 and 9 were 1001-5000, 7 were 5001 – 10000 and only one parent income was more than 10000. 27 students belong to nuclear family and 28 were joint family and 4 were extended family and 1 belongs to single parent family.

19 were vegetarian 19 were non vegetarian 18 belongs to natural diet .4 were fast food habit. 38 resides at village 4 belongs town panchayath, 9 belongs to town and 9 corporation. 44 were consuming tap water and only 3 % consume well water.

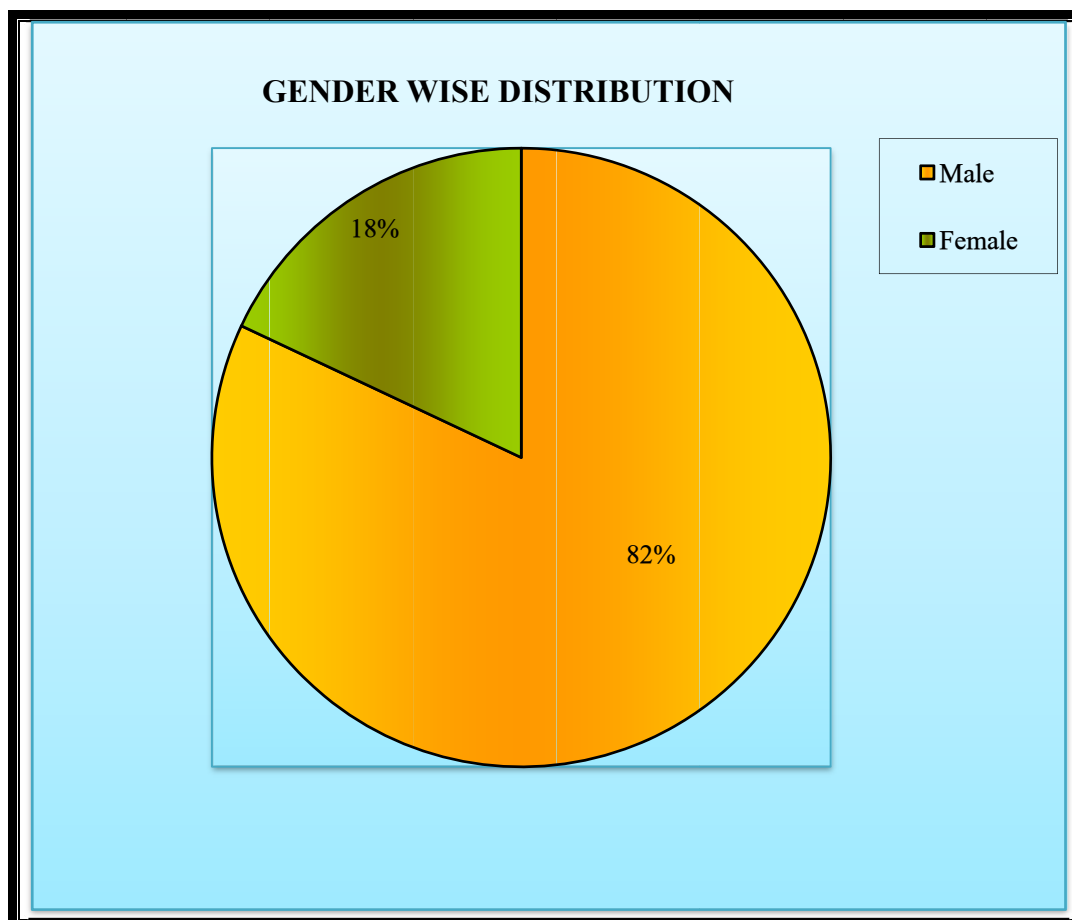


Figure 4 Percentage wise distributions of students based on gender

Above figure reveals that majority (82%) of participants was male and 18 % were female.

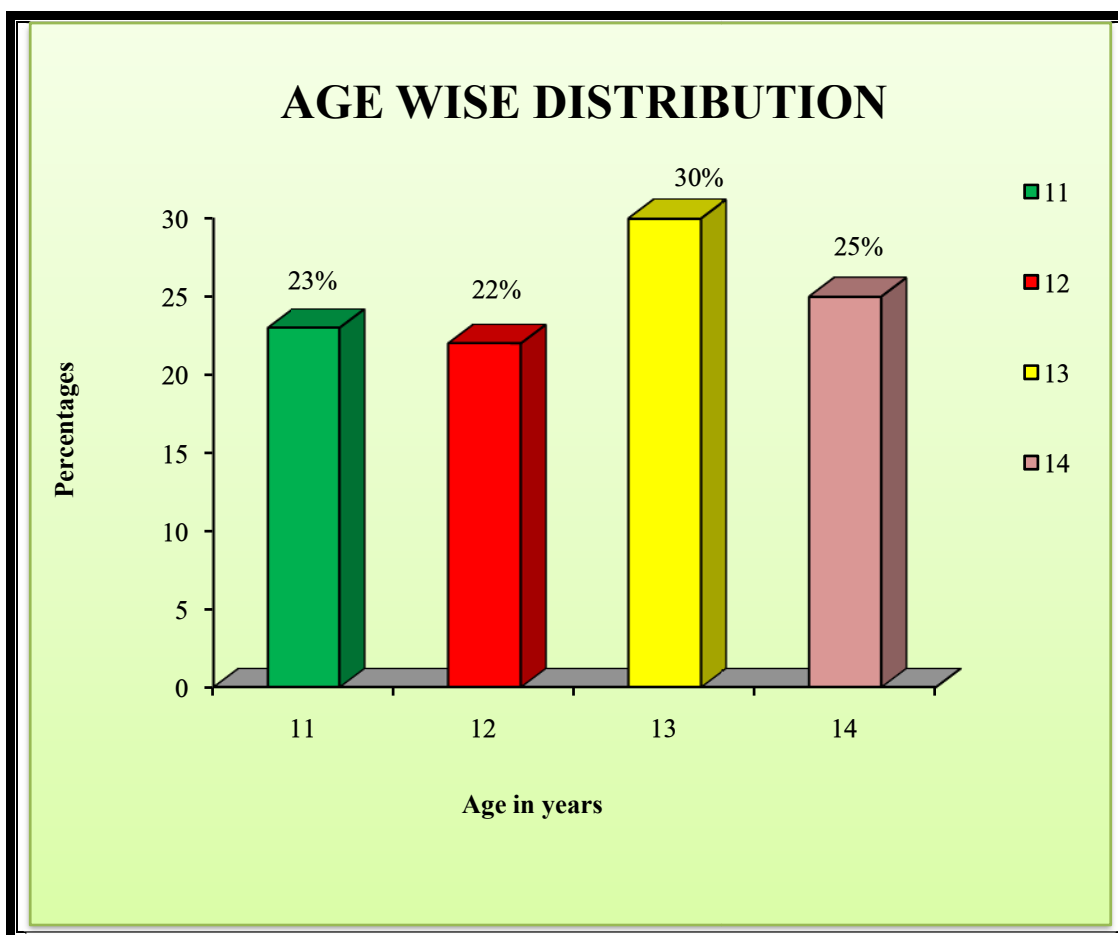


Figure 5 Percentage wise distributions of students based on age

Above figure shows that most of the participants were 13 years (30%) and 12 years were least (22 %), 11 years were 23% and 14 years were 25 %.

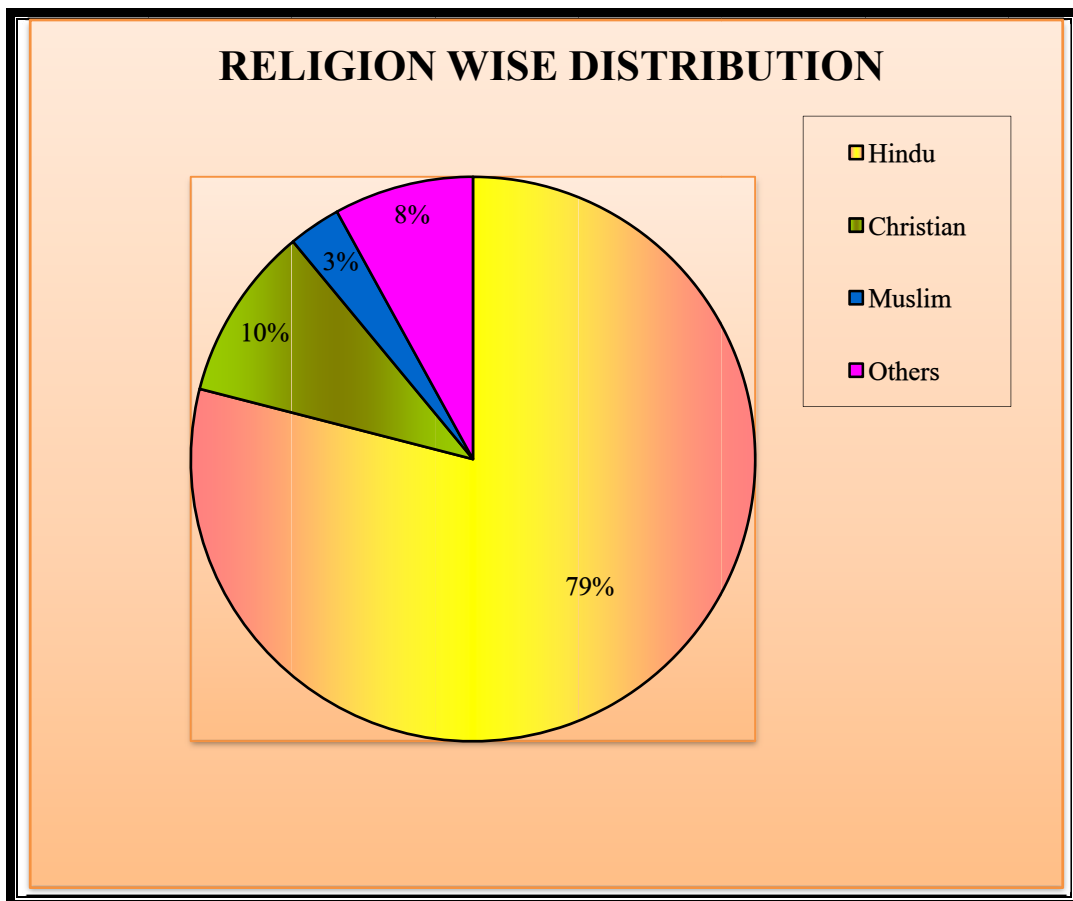


Figure 6 Percentage wise distributions of students based on religion

Above figure represents that majority of the participants were belonged (79 %) Hindu religion.10 % of the participants were belonged Christian and 8% of the participants were belonged other religion and only 3 % of the participants were belonged Muslim.

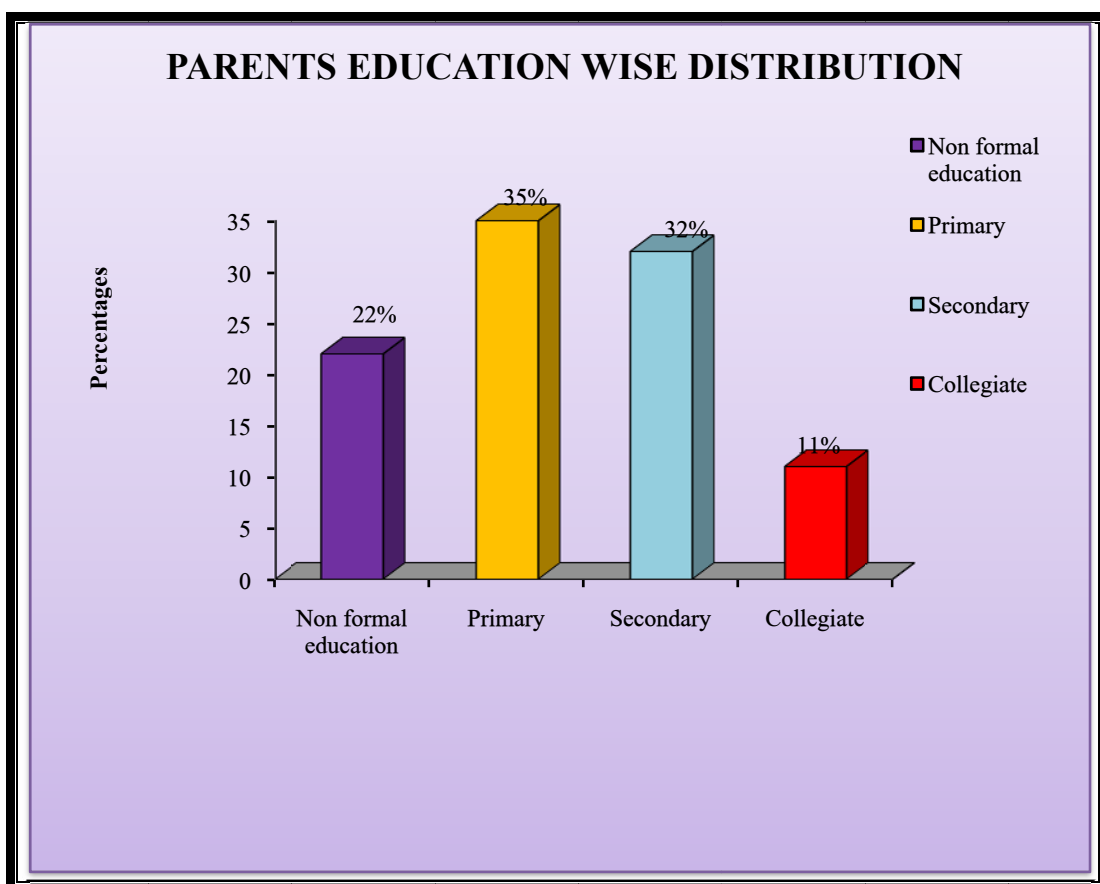


Figure 7 Percentage wise distributions of students based on patents education

Above figure shows that 35 % of student’s parent were educated up to primary class only. 22% of students parent were non formal educated and 32 % of students parent were educated up to higher secondary class and only 11 % of students parent were educated up to college education.

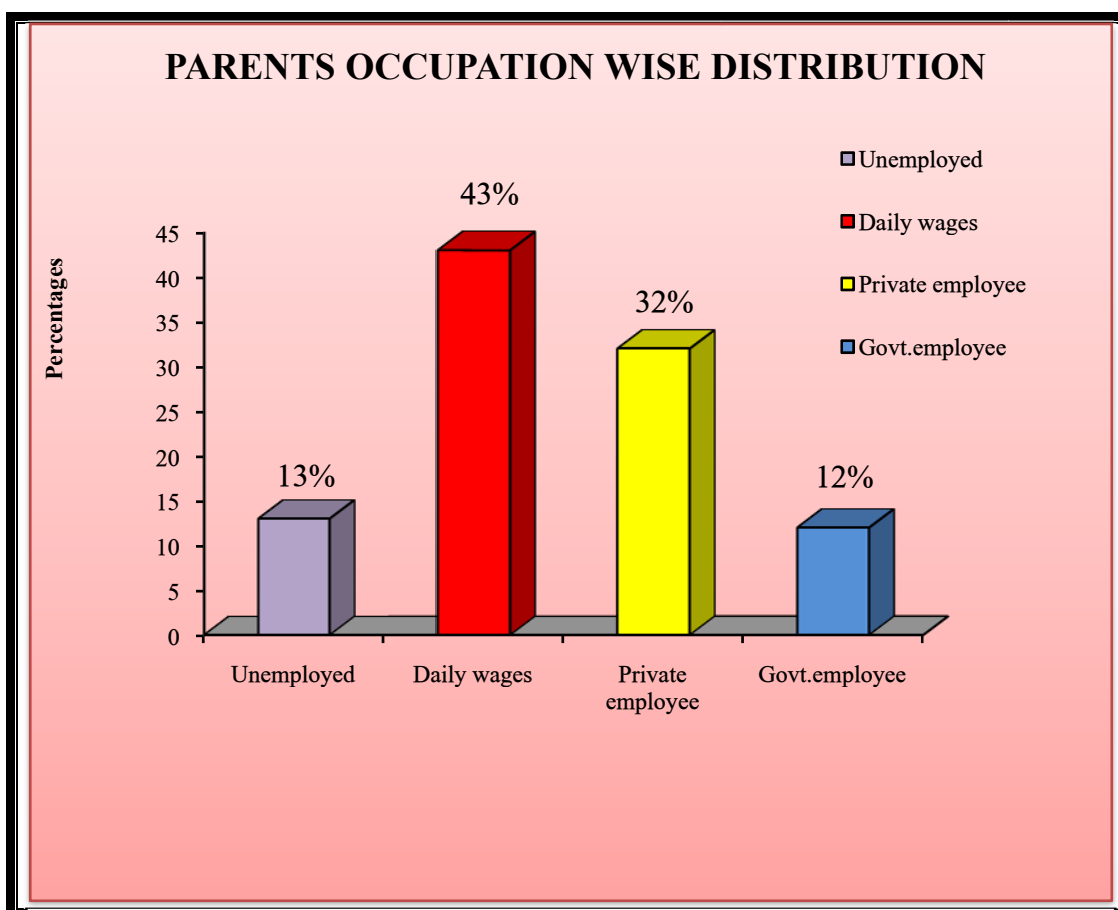


Figure 8 Percentage wise distributions of students based on parent’s occupation

Above figure reveals that only 12 % of participants parent were Government employee and 32 % of participants parent were private employee. 43 % of participants parent were daily wages and 13 % of participants parent were unemployed.

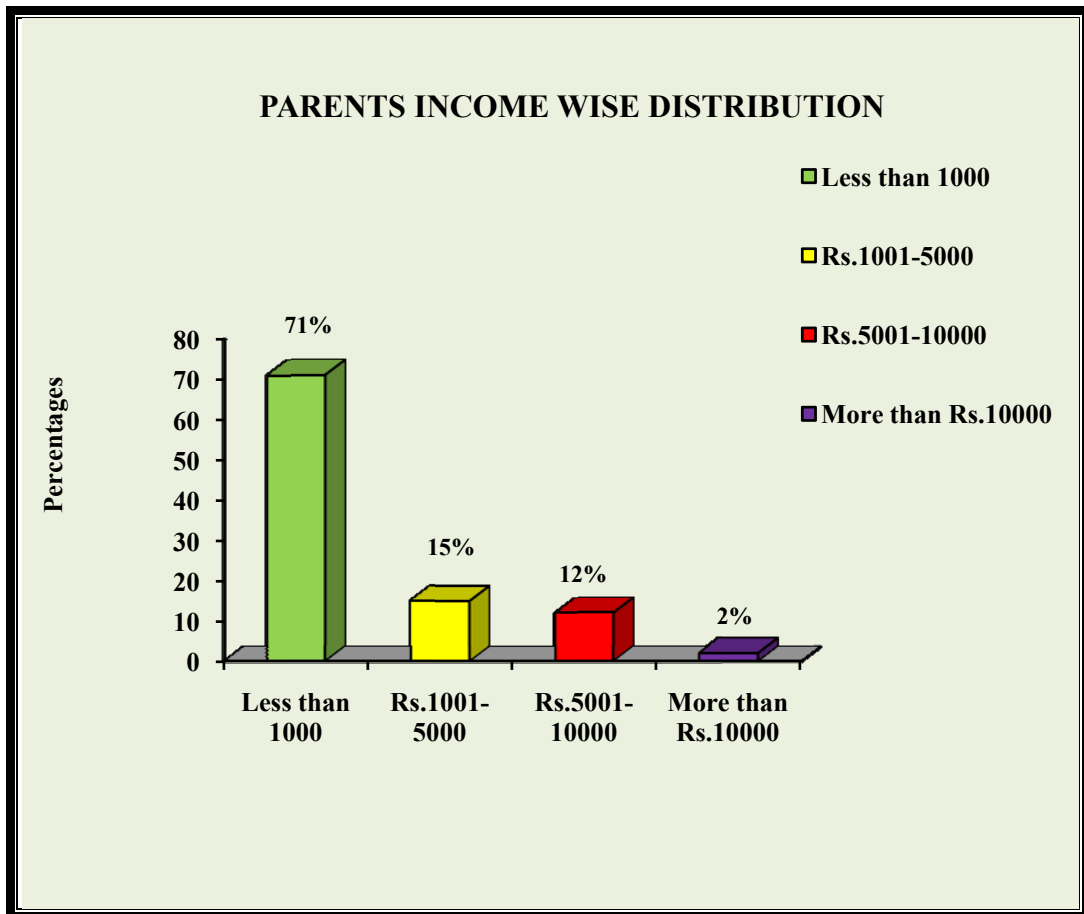


Figure 9 Percentage wise distributions of students based on parent’s income

Above figure represents that majority of the participants (71%) parent income were less than 1000 rupees per month. 15 % parent income were between 1001 – 5000 and 12 % parent income were between 5001 -10000 . Only 2 % parent income were more than 10000.

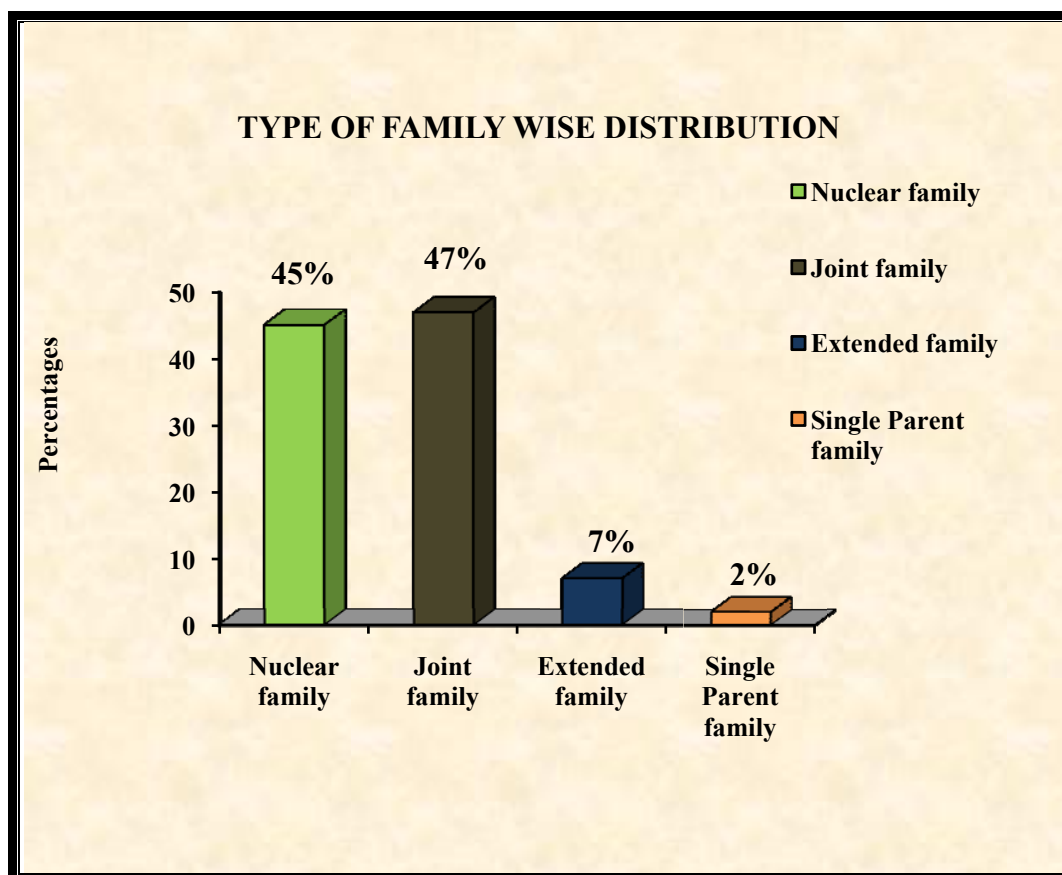


Figure 10 Percentage wise distributions of students based on family type

Above figure shows that majority (47 %) of the participants was belonged joint family. And 45 % of the participants were belonged nuclear family, 7 % of the participants were belonged extended family and only 2 % of the participants were belonged single parent family.

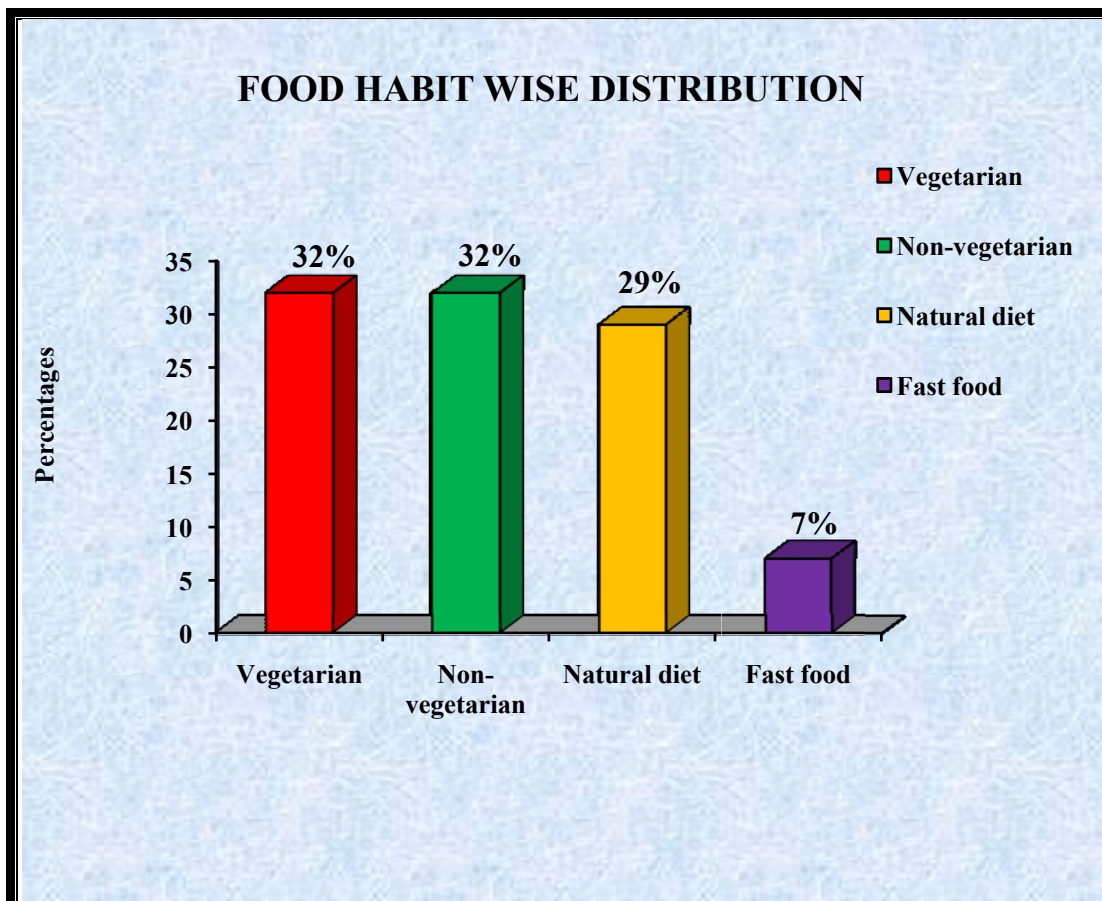


Figure 11 Percentage wise distributions of students based on their food habit

Above Bar diagram represents that vegetarian and non vegetarian were equally (32) participated. And 29 % participants food habit were natural diet, only 7% participant's food habit were fast food.

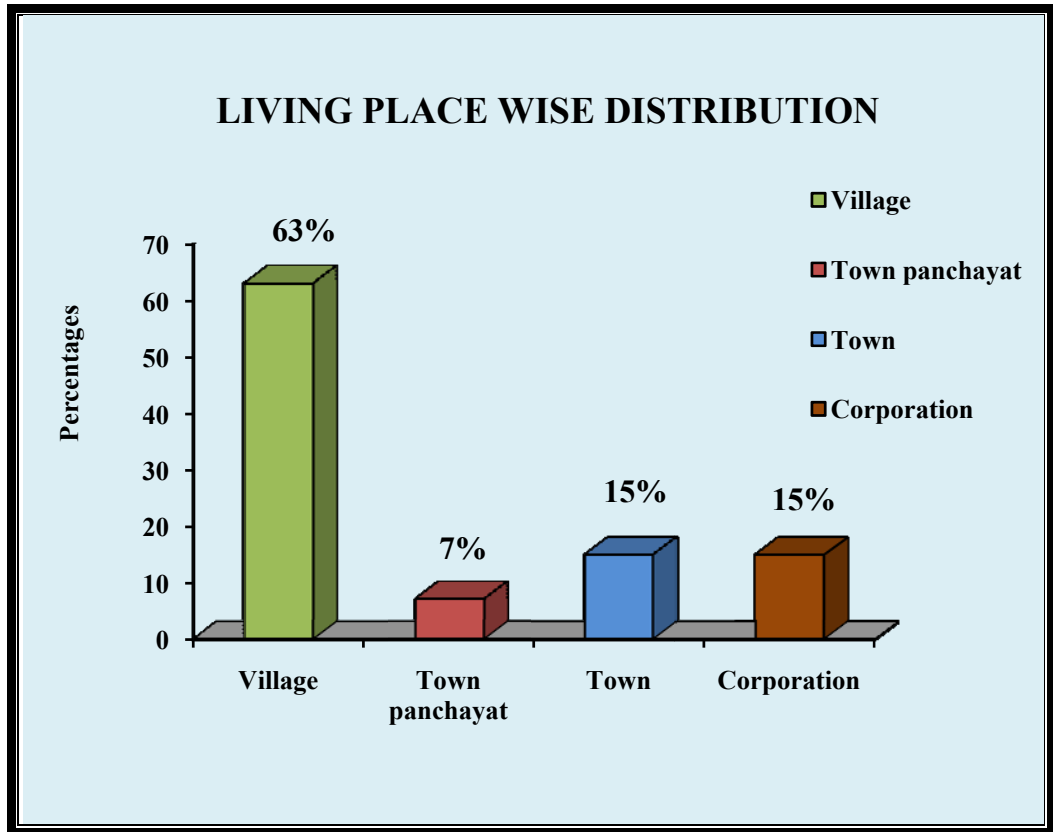


Figure 12 Percentage wise distributions of students based on their living place

Above figure reveals that majority (63 %) participants were belonged village. And 15 % of participants were equally living in town and corporation. And only 7 % belonged town panchayat.

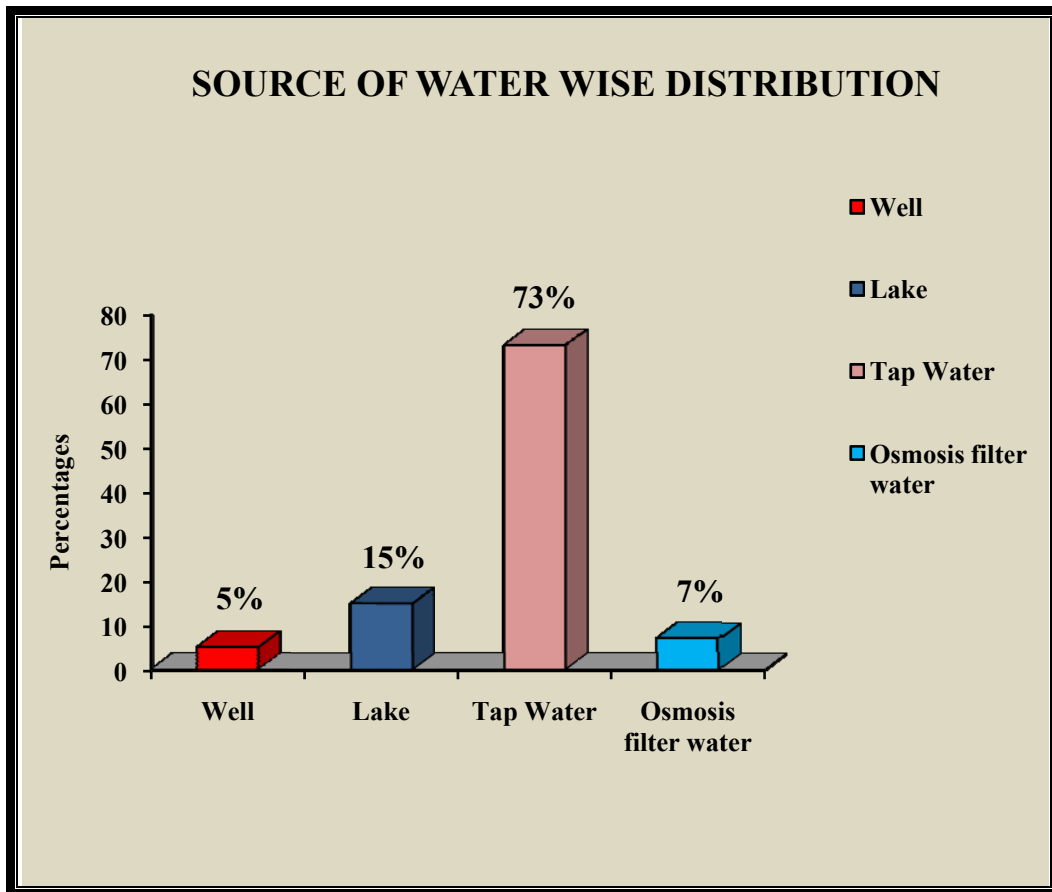


Figure 13 Percentage wise distributions of students based on their water source

Above figure shows that majority (73 %) of participants were taken drinking water from tap water source. And 15 % of participants were taken drinking water from lake ,7 % of participants were taken drinking water from osmosis filter and only 5 % of participants were taken drinking water from well.

SECTION B
EFFECTIVENESS OF VIDEO ASSISTED INSTRUCTION REGARDING
DENTAL HEALTH ON KNOWLEDGE AND PRACTICE AMONG
STUDENTS

TABLE- 2

Pre Test Mean, SD and Mean % of knowledge and practice scores

Pre test	Max. score	Mean	SD	Mean%
Knowledge	10	2.53	1.38	25
Practice	10	3.11	1.41	31

Above table analyzed the pretest level of dental health knowledge and practice.

Pre test dental health knowledge Mean was 2.53 and standard deviation was 1.38 and also mean % was 25. Pre test dental health practice Mean was 3.11 and standard deviation was 1.41 and also means % was 31.

TABLE 3

Post Test Mean, SD and Mean% of knowledge and practice scores

Post test	Max. score	Mean	SD	Mean%
Knowledge	10	8.3	1.07	83
Practice	10	8.73	1.15	87

The above table analyzed the post test level of dental health knowledge and practice. Post test dental health knowledge Mean was 8.3 and Standard Deviation was 1.07 and also Mean % was 83. Post test dental health practice Mean were 8.73 and Standard Deviation were 1.15 and also Mean % were 87.

TABLE-4

**Overall (Pre Test and Post Test) Mean, SD and Mean% of
Dental health knowledge and practice scores**

Overall	Pre test			Post test			Difference in mean%
	Mean	SD	Mean%	Mean	SD	Mean%	
Knowledge	2.53	1.38	25	8.3	1.07	83	58
Practice	3.11	1.41	31	8.73	1.15	87	56

Above table revealed that effectiveness of video assisted instructions on dental health Knowledge and Practice in Mean %.

Difference in Mean% of Dental health Knowledge was 58.

Difference in Mean% of Dental health Practice was 56.

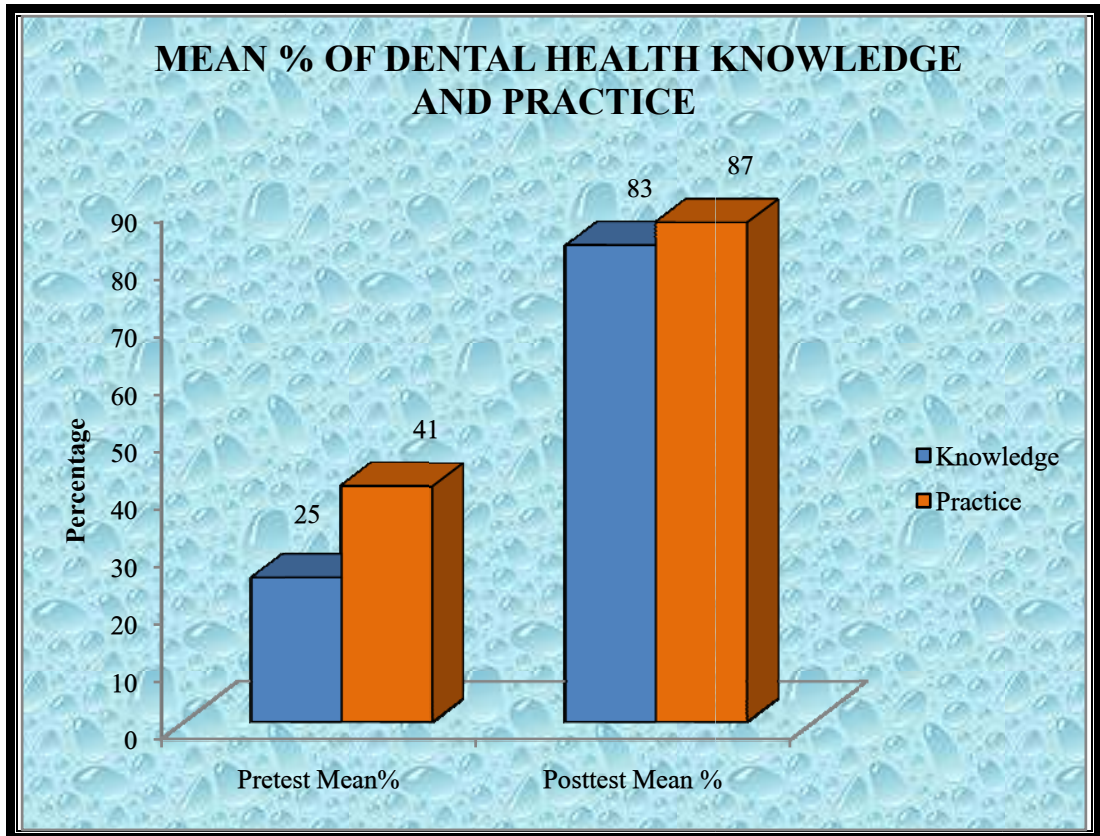


Figure 14 Pre and Post Test Mean % of dental health knowledge and practice

Above figure showing pre test dental health knowledge and practice mean % were 25 and 31 respectively. Post test dental health knowledge and practice Mean % were 83 and 87 respectively.

TABLE-5

**Frequency and percentage wise distribution of pre test and post test
Dental health knowledge level**

Dental Health Knowledge Level	Pre test		Post test	
	f	%	f	%
Very poor	32	53	-	-
Poor	24	40	-	-
Average	4	7	6	10
Good	-	-	24	40
Excellent	-	-	30	50

Above table reveals that pretest level of dental health knowledge. In that 32 (53%) were very poor and 24(40%) were poor and 4 (7%) were average in knowledge. No good or excellent. Post test level of knowledge were only 6(10%) were average and 24(40%) were good in knowledge and 30 (50 %) were excellent in knowledge, No poor or very poor.

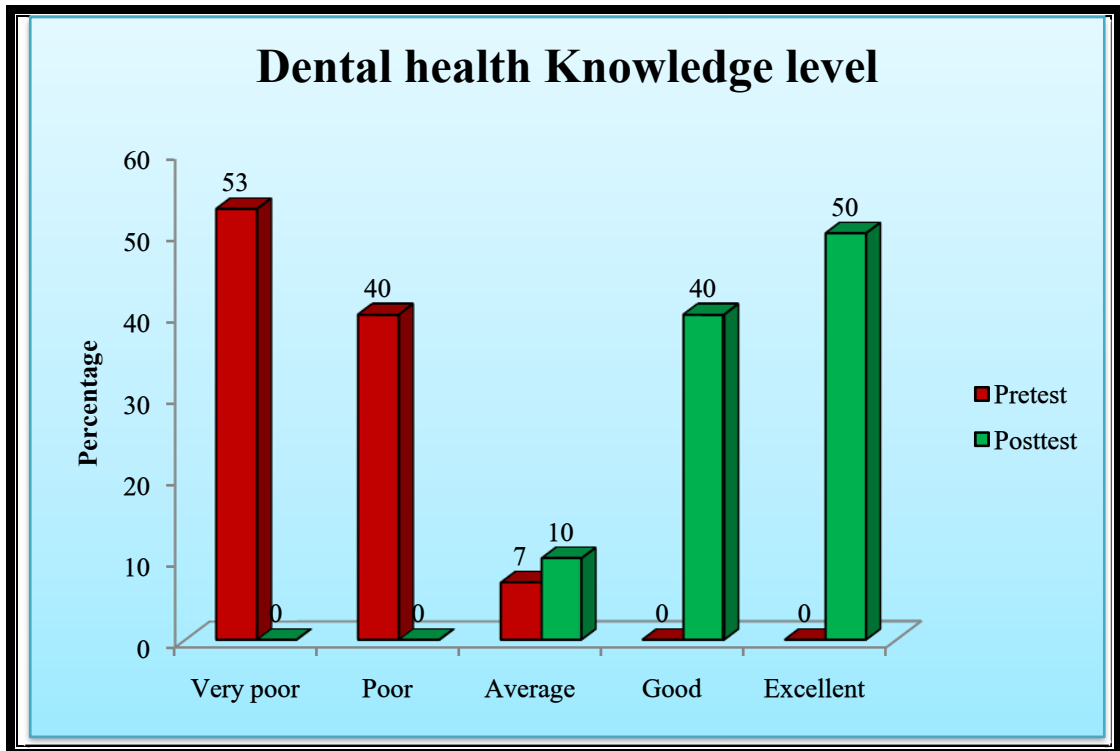


Figure 15 Pre and Post Test Dental Health Knowledge level

Above figure showing that the pretest level of dental health knowledge. In that 32 (53%) were very poor and 24(40%) were poor and 4 (7%) were average in knowledge.

No good or excellent. Post test level of knowledge were only 6(10%) were average and 24(40%) were good in knowledge and 30 (50 %) were excellent in knowledge, No poor or very poor.

TABLE-6**Frequency and percentage wise distribution of pre test and post test
Dental Health Practice Level**

Dental Health Practice Level	Pre test		Post test	
	f	%	f	%
Very poor	32	53	-	-
Poor	24	40	-	-
Average	4	7	6	10
Good	-	-	24	40
Excellent	-	-	30	50

Above table reveals that pretest level of practice. In that 32 (53%) were very poor and 24(40%) were poor and 4 (7%) were average in practice .No good or excellent. Post test level of practice were only 6(10%) were average and 24(40%) were good in practice and 30 (50 %) were excellent in practice, No poor or very poor.

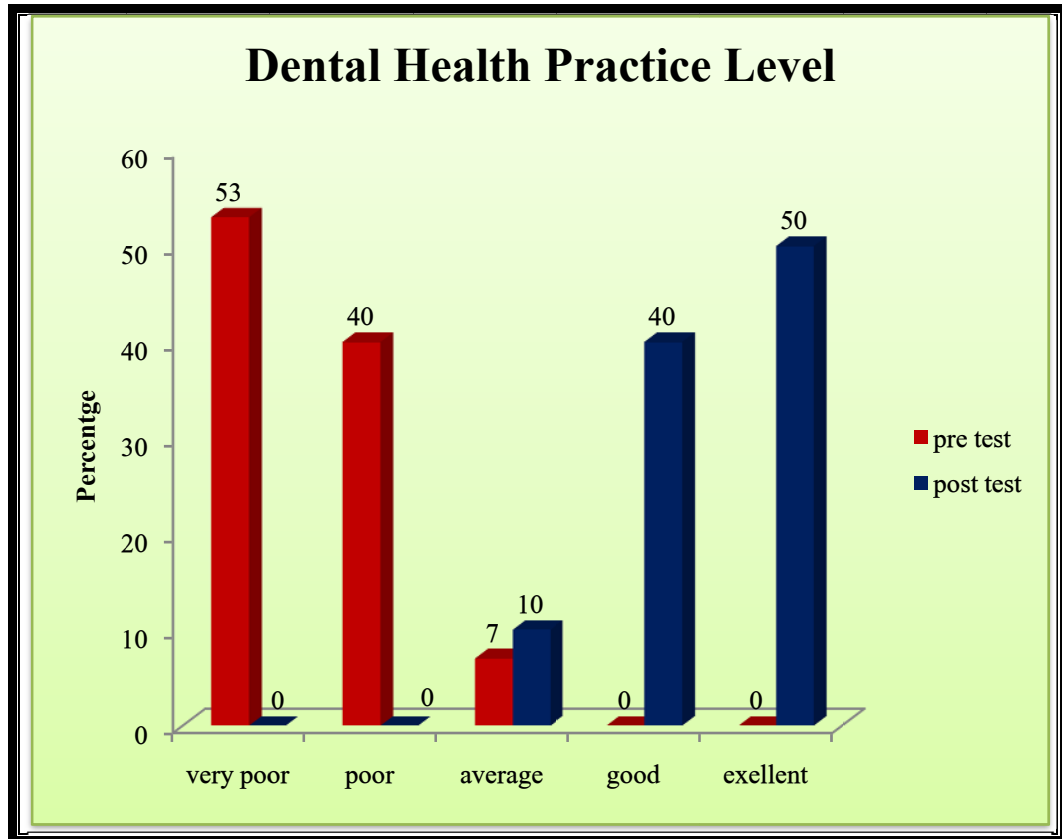


Figure 16 Pre Test and Post Test Dental Health Practice Level

Above figure showing that the pretest level of practice. In that 32 (53%) were very poor and 24(40%) were poor and 4 (7%) were average in practice. No good or excellent. Post test level of practice were only 6(10%) were average and 24(40%) were good in practice and 30 (50 %) were excellent in practice. No poor or very poor.

TABLE- 7

Paired “t”-test assess the effectiveness of video assisted instruction

Overall	Post test		Pre test		‘t’- value	p-value
	Mean	SD	Mean	SD		
Knowledge	8.3	1.07	2.53	1.38	31.22	0.000***
Practice	8.73	1.14	3.11	1.41	34.43	0.000***

(*P<0.05 - significant and **P<0.01 & *P<0.001 - Highly significant)**

Above table shows that ‘t’ value of dental health knowledge was 31.22 and p value 0.000. ‘t’ value of dental health practice were 34.43 and p value 0.000 Which indicates the study was highly significant.

SECTION C

Assess the Correlation between dental health knowledge and practice

TABLE-8
Karl-Pearson test for the pre test and post test
Dental health knowledge and practice

Overall (knowledge-practice)	'r'-value	P-value
Pretest	0.19	0.14
post test	0.695	0.000***

The above table illustrated that there was a highly significant positive correlation had been found between knowledge and practice in pre test with 'r' value 0.19 and in post test 'r' value 0.695.

SECTION D

**Distribution of demographic variables to find out association with
Post test Dental health knowledge and practice score**

TABLE-9

**Chi- square test to find out association of demographic variables and post test
Dental health knowledge score**

Demographic variables	Average		Good		Excellent		χ^2	p-value
	f	%	f	%	f	%		
Sex:								
Male	6	10	19	32	24	40	1.51	0.78
Female	0	0	5	8	6	10		
Age(in years):								
11	0	0	7	12	7	12	6.19	0.401
12	1	2	5	8	7	12		
13	3	5	4	7	11	18		
14	2	3	8	13	5	8		
Religion:								
Hindu	6	10	20	33	21	35	5.35	0.51
Christian	0	0	3	5	3	5		
Muslim	0	0	0	0	2	3		
Others	0	0	1	2	4	7		
Education of parents:								
Non formal Education	2	3	2	3	9	15	6.58	0.345
Primary	1	2	11	18	9	15		
Secondary	3	5	8	13	8	13		
Collegiate	0	0	3	5	4	7		
Occupation of parents:								
Unemployed	0	0	3	5	5	8	3.08	0.79
Daily wages	4	7	11	18	11	18		
Private employee	1	2	7	12	11	18		
Govt. employee	1	2	3	5	3	5		

Demographic variables	Average		Good		Excellent		χ^2	p-value
	f	%	f	%	f	%		
Monthly income of parents :								
Less than 1000	6	10	14	23	23	38	6.66	0.354
Rs 1001-5000	0	0	6	10	3	5		
Rs5001-10000	0	0	4	7	3	5		
More than Rs.10000	0	0	0	0	1	2		
Type of family:								
Nuclear family	3	5	8	13	16	27	3.81	0.702
Joint family	3	5	13	22	12	20		
Extended family	0	0	2	3	2	3		
Single parent family	0	0	1	2	0	0		
Food habit:								
Vegetarian	3	5	8	13	8	13	6.94	0.327
Non vegetarian	2	3	4	7	13	22		
Natural Diet	1	2	9	15	8	13		
Fast Food	0	0	3	5	1	2		
Living place:								
Village	5	8	17	28	16	27	4.73	0.579
Town panchayat	0	0	2	3	2	3		
Town	1	2	3	5	5	8		
Corporation	0	0	2	3	7	12		
Source of drinking water:								
Well	0	0	1	2	2	3	2.68	0.85
Lake	0	0	4	7	5	8		
Tap Water	6	10	17	28	21	35		
Filter Water	0	0	2	3	2	3		

Above table revealed that there is a no significant association between post test dental health knowledge and demographic variables.

TABLE-10

**Chi- square test to find out association of demographic variables and post test
Dental health practice score**

Demographic variables	Average		Good		Excellent		χ^2	p-value
	f	%	f	%	f	%		
Sex:								
Male	6	10	19	32	24	40	1.5	0.47
Female	0	0	5	8	6	10		
Age(in years):								
11	0	0	7	12	7	12	6.19	0.401
12	1	2	5	8	7	12		
13	3	5	4	7	11	18		
14	2	3	8	13	5	8		
Religion:								
Hindu	6	10	20	33	21	35	5.35	0.5
Christian	0	0	3	5	3	5		
Muslim	0	0	0	0	2	3		
Others	0	0	1	2	4	7		
Education of parents:								
Non formal Education	2	3	2	3	9	15	6.58	0.36
Primary	1	2	11	18	9	15		
Secondary	3	5	8	13	8	13		
Collegiate	0	0	3	5	4	7		
Occupation of parents:								
Unemployed	0	0	3	5	5	4	3.08	0.79
Daily wages	4	7	11	18	11	18		
Private employee	1	2	7	12	11	18		
Govt. employee	1	2	3	5	3	5		

Demographic variables	Average		Good		Excellent		χ^2	p-value
	f	%	f	%	f	%		
Monthly income of parents :								
Less than 1000	6	10	14	23	23	38	6.66	0.354
Rs 1001-5000	0	0	6	10	3	5		
Rs 5001-10000	0	0	4	7	3	5		
More than Rs.10000	0	0	0	0	1	2		
Type of family:								
Nuclear family	3	5	8	13	16	27	3.82	0.702
Joint family	3	5	13	22	12	20		
Extended family	0	0	2	3	2	3		
Single Parent Family	0	0	1	2	0	0		
Food habit:								
vegetarian	3	5	8	13	8	13	6.94	0.33
non vegetarian	2	3	4	7	13	22		
natural diet	1	2	9	15	8	13		
fast food	0	0	3	5	1	2		
Living place:								
village	5	8	17	28	16	27	4.73	0.59
Town panchayat	0	0	2	3	2	3		
Town	1	2	3	5	5	8		
Corporation	0	0	2	3	7	44		
Source of drinking water:								
Well	0	0	1	2	2	3	2.65	0.852
Lake	0	0	4	7	5	8		
Tap Water	6	10	17	28	21	35		
Filter Water	0	0	2	3	2	3		

Above Table revealed that there is a no significant association between dental health practice and demographic variables.

Discussion

CHAPTER-V

DISCUSSION

Based on the objectives of the study and hypotheses, this chapter deals with the detailed discussion of the results of the data interpreted from the statistical analysis. The purpose of the study was to evaluate the Effectiveness of Video Assisted Instructions on Knowledge and Practice Regarding Dental Health among Early Adolescents.

DISCUSSION OF DEMOGRAPHIC VARIABLES

- Majority (82%) of participants were male and 18 % were female. Most of the participants were 13 years (30%) and 12 years were least (22 %), 11 years were 23% and 14 years were 25 %.
- Majority of the participants were belonged (79 %) Hindu religion. 10 % of the participants were belonged Christian and 8% of The participants were belonged other religion and only 3 % Of the participants were belonged Muslim.
- 35 % of students parent were educated up to primary class only. 22% of students parent were non formal educated and 32 % of students parent were educated up to higher secondary class and only 11 % of students parent were educated up to college education.
- Only 12 % of participants parent were Government employee and 32 % of participants parent were private employee. 43 % of participants parent were daily wages and 13 % of participants parent were unemployed.
- Majority of the participants (71%) parent income were less than 1000 rupees per month. 15 % parent income were between 1001 – 5000 and 12 % parent income were between 5001 -10000. Only 2 % parent income were more than 10000.
- Majority (47 %) of the participants were belonged joint family. And 45 % of the participants were belonged nuclear family, 7 % of the participants were belonged extended family and only 2 % of the participants were belonged single parent family.

- Vegetarian and non vegetarian were equally (32) participated. And 29 % participants food habit were natural diet, only 7% participant's food habit were fast food.
- Majority (63 %) participants were belonged village. And 15 % of participants were equally living in town and corporation. And only 7 % belonged town panchayat.
- Majority (73 %) of participants were taking drinking water from tap water source.
- 15 % of participants were taking drinking water from lake ,7 % of participants were taking drinking water from osmosis filter and only 5 % of participants were taking drinking water from well.

FINDINGS BASED ON THE OBJECTIVES

- **The first objective was to assess the pre test level of knowledge and practice regarding dental health among early adolescents:**

The findings revealed that among the total number of 60 subjects. Pretest level of dental health knowledge 32 (53%) were very poor and 24(40%) were poor and 4 (7%) were average in knowledge .No good or excellent.

Pretest level of dental health practice 32 (53%) were very poor and 24(40%) were poor and 4 (7%) were average in practice .No good or excellent.

Pre test Dental health knowledge mean were 2.53 and standard deviation were 1.38 and also mean % were 25 .Pre test Dental health practice mean were 3.11 and standard deviation were 1.41 and also Mean % were 31 .

The findings were consistent with Humagain M (2011) study on Evaluation of Knowledge, Attitude and Practice (KAP) About Oral Health among Secondary Level Students of Rural Nepal of 1000 secondary level school children and they also found that oral health related KAP among the secondary school level students of rural Nepal is poor.

- **The second objective was to evaluate the effectiveness of video assisted instructions on knowledge and practice regarding dental health among early adolescents**

Post test Level of dental health Knowledge were only 6(10%) were average and 24(40%) were good in knowledge and 30 (50 %) were excellent in knowledge, No poor or very poor.

Post test Level of dental health practice were only 6(10%) were average and 24(40%) were good in practice and 30 (50 %) were excellent in practice, No poor or very poor.

The findings were also consistent with Goel P, Sehgal M, Mittal R. (2010) study on evaluating the effectiveness of school-based dental health education program among children at New Delhi. They were also found that educational intervention was successful in improving the Dental health awareness of most children.

Hence the hypothesis (H1) “There will be significant difference between pre test and post test dental health knowledge and practice score” was retained.

- **The third objective was to correlate the relationship between dental health knowledge and practice**

There was a highly significant positive correlation had been found between knowledge and practice in pre test with ‘r’ value 0.19 and in post test ‘r’ value 0.695.

- **The fourth objective was to associate the post test knowledge and practice regarding dental health with selected demographical variables**

There is no association between post test dental health knowledge, practice and demographic variables.

The findings were consistent with Cheah Whye Liana (2009) study on dental health knowledge, attitude and practice among school children. Their results also showed no significant association between demographic variables and post test dental health knowledge and practice level.

Hence the second Hypothesis (H2) “**There will be significant association between post test dental health knowledge and practice scores and selected demographic variables**” was detained.

*Summary,
Conclusion &
Recommendations*

CHAPTER – VI

SUMMARY, CONCLUSION, IMPLICATIONS AND RECOMMENDATIONS

This chapter deals with the summary of the study and conclusions drawn. It also clarifies the limitations of the study, the implications for different areas like nursing educations, administration, nursing practice, nursing research and recommendations.

6.1 SUMMARY

The present study was aimed at evaluating the effectiveness of video assisted instructions on knowledge and practice regarding dental health among early adolescents in selected school Madurai.

The objectives of the study were

1. To assess the pre test level of knowledge and practice regarding dental health among early adolescents
2. To evaluate the effectiveness of video assisted instructions on knowledge and practice regarding dental health among early adolescents
3. To correlate the relationship with dental health knowledge and practice
4. To associate the post test knowledge and practice regarding dental health with selected Demographical variables

The following hypotheses were tested.

H1: There will be significant difference between pretest and post test score
There was highly significant difference between pretest score and post test score

H2: There will be significant association between post test knowledge and practice scores and selected demographic variables.

There was no association between post test knowledge and practice score with selected demographical variables

The conceptual framework for this study was based on Wiedenbach's Helping Art of clinical nursing theory. A pre experimental one group pre test and post test research design was used in this study. The independent variable was video assisted instructions and dependent variables were dental health knowledge and practice. This study was conducted at Sri Gopalakrishna Higher Secondary School Siruthur Madurai 14 .The accessible population of the study was early adolescents who were studying at above school

The study students were selected using Purposive sampling.

The data collection tools used were

1. Demographic Data.
2. Self administered dental health knowledge questionnaire.
3. Self administered dental health practice questionnaire.

The content validity was obtained from 3 Child Health Nursing experts and 1 Professor of child health department and 1 professor of dental department at various institutions. Expert's suggestions were incorporated in the tool.

The pilot study was conducted at above school for a period of 7 days from 01-08-2012 to 07-08-2012. About 10 subjects were selected using Purposive sampling. The results showed significant. After obtaining the formal permission from Institutional Review Board / Independent Ethical Committee of Government Rajaji Hospital, Madurai-20 and Correspondent and Head Mistress of Sri Gopalakrishna Higher Secondary School Siruthur Madurai. The data collection was done for a period of 4 weeks. (16.08.2012 to 15.09.2012). Based on the objectives and hypotheses, the data collected were analyzed by using descriptive and inferential statistics.

Major findings of the study

- Majority (82%) of participants were male and 18 % were female.
- 35 % of students parent were educated up to primary class only. 22% of students parent were non formal educated and 32 % of students parent were educated up to higher secondary class and only 11 % of students parent were educated up to college education.

- Majority (73 %) of participants were taking drinking water from tap water source.
- Pretest level of dental health knowledge 32 (53%) were very poor and 24(40%) were poor and 4 (7%) were average in knowledge .No good or excellent.
- Pretest level of dental health practice 32 (53%) were very poor and 24(40%) were poor and 4 (7%) were average in practice .No good or excellent.
- Dental health knowledge mean were 2.53 and standard deviation were 1.38 and also mean % were 25 .Dental health practice mean were 3.11 and standard deviation were 1.41 and also Mean % were 31.
- Post test Level of dental health Knowledge were only 6(10%) were average and 24(40%) were good in knowledge and 30 (50 %) were excellent in knowledge, No poor or very poor.
- Post test Level of dental health practice were only 6(10%) were average and 24(40%) were good in practice and 30 (50 %) were excellent in practice, No poor or very poor.
- There is no association between post test dental health knowledge, practice and demographic variables.
- Highly significant positive correlation had been found between knowledge and practice in pre test with r value 0.19 and in post test r value 0.695.

6.2 CONCLUSION

According to the results of this study, early adolescents who listened to 30 minutes of video assisted instructions regarding dental health through video and pamphlet and handout had a statistically significant in improving knowledge and practice of dental health. Because video assisted instructions were non invasive, free from side effects and highly feasible, the researcher concluded that it can be used as an effective intervention to improve knowledge and practice regarding dental health.

6.3 IMPLICATIONS

The investigator had drawn implications from this study for various areas such as nursing practice, nursing education, nursing administration and nursing research.

Implications for Nursing Practice

1. The nurses must be trained to assess the various dental health problems among school children.
2. The nurses must have the understanding of the need to provide non-pharmacological, cost effective approaches to improve the dental health knowledge and practice among school children.
3. In the clinical area, provision can be made to provide video assisted instructions regarding dental health sessions to children.
4. The nurses should educate the school children about the benefits of dental hygiene and encourage the clients to practice it.

Implications for Nursing Education

1. The concepts of video assisted instructions regarding dental health should be included in the nursing curriculum of Undergraduate and Postgraduate programme.
2. A well organized Continuing Nursing Education programme that focuses on effects of video assisted instructions regarding dental health can be conducted as an in-service programme for all nursing personnel.

Implications for Nursing Administration

1. Health education team can be formed to improve dental health among school children.
2. The nurse administrators can motivate, supervise and guide the nurses in the assessment of dental health among school children
3. The nurse administrators can recommend installing video assisted instructions regarding dental health in the wards and waiting area so that listening can be made as a part of daily routine to improve the dental health knowledge and practice among school children.

Implications for nursing research

1. The nurse researcher should motivate the clinical nurses and community nurse to apply research findings to improve the dental health knowledge and practice among school children
2. The nurse researcher should encourage clinical nurse to conduct further Research studies on the effectiveness of video assisted instructions on dental health
3. This study can be used as a baseline for future studies to build upon.

6.4 RECOMMENDATIONS

1. This study can be replicated with a large sample size for better generalization.
2. A comparative study can be done between video assisted instructions and other methods such as self instructional module to evaluate the effectiveness in improving the dental health knowledge and practice among school children.
3. A study can be conducted to assess the current knowledge, skill and attitude of nursing staffs on management of dental problems.
4. Investigator recommends the school authority to include dental hygiene subjects in the curriculum.

6.5 LIMITATIONS

The limitations of this study were

1. The students were engaged in their pre scheduled theory hour. So study was conducted with prior permission and alternate arrangement time without disturbance of their theory classes otherwise no limitations.

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Appendices

APPENDIX – A

DATA COLLECTION TOOL

SECTION – A: DEMOGRAPHIC VARIABLE

(Please put ✓ mark in correct one)

Sample No:

1. **Gender**
 - a) Male ()
 - b) Female ()
2. **Age in years**
 - a) 11 Years ()
 - b) 12 years ()
 - c) 13 years ()
 - d) 14 years ()
3. **Religion**
 - a) Hindu ()
 - b) Christian ()
 - c) Muslim ()
 - d) Others ()
4. **Education Of parent**
 - a) No formal Education ()
 - b) Primary Education ()
 - c) Secondary Education ()
 - d) Collegiate ()
5. **Occupation of parent**
 - a) Unemployed ()
 - b) Daily wages ()
 - c) Private employee ()
 - d) Government employee ()

- 6. Income of parent**
- a) Less than Rs. 1000 per month ()
 - b) Rs. 1001 – 5000 per month ()
 - c) Rs. 5001-10000 per month ()
 - d) More than Rs. 10000 per month ()
- 7. Type of the family**
- a) Nuclear Family ()
 - b) Joint Family ()
 - c) Extended Family ()
 - d) Single Parent Family ()
- 8. Food habit**
- a) Vegetarian ()
 - b) Non Vegetarian ()
 - c) Natural Diet ()
 - d) Fast Food ()
- 9. Living place**
- a) Village ()
 - b) Town Panchayat ()
 - c) Town ()
 - d) Corporation ()
- 10. Source of drinking water**
- a) Well ()
 - b) Lake ()
 - c) Tap Water ()
 - d) Osmosis Filter Water ()

SECTION –B (Knowledge Regarding Dental Health)

1. **What are two types of teeth ?**
 - a. Milk teeth and molar ()
 - b. Milk teeth and permanent teeth ()
 - c. Milk teeth and incisors ()
 - d. Milk teeth and premolars ()
2. **Approximately in which age wisdom tooth started?**
 - a. Below 5 Years ()
 - b. 6 To 7 Years ()
 - c. Within 10 Years ()
 - d. Above 15 Years ()
3. **What are the Functions of tooth ?**
 - a. Grinding The Food ()
 - b. Speech ()
 - c. Smile ()
 - d. All above ()
4. **Which mineral need to strong the teeth ?**
 - a. Chloride ()
 - b. Flouride ()
 - c. Sulphide ()
 - d. Phosphide ()
5. **Which one of the following, the teeth contain?**
 - a. Lymph ()
 - b. Acid ()
 - c. Nerve And Blood Vessels ()
 - d. Valve ()
6. **Which organ majorly affected by dental problem?**
 - a. Heart ()
 - b. Lungs ()
 - c. Eye ()
 - d. Kidney ()

7. Which vitamin essential for gums?

- a. vitamin A ()
- b. vitamin B ()
- c. vitamin C ()
- d. vitamin D ()

8. Which type of food affect the tooth ?

- a. Apple ()
- b. Orange ()
- c. Milk ()
- d. Sweets ()

9. Which one of the following best for brushing ?

- a. Neem stick ()
- b. Tamarind stick ()
- c. Banyan tree stick ()
- d. Brush with Paste ()

10. What is name of the procedure to remove the plaque

- a. Bleaching ()
- b. Flossing ()
- c. Rinsing ()
- d. Painting ()

SECTION -C

Regarding Dental Health Practice

1. How many times you are brushing per day

- a. One Time ()
- b. Two times ()
- c. Alternate Days ()
- d. None ()

2. What things you are using for clean the tooth?

- a. Ashes ()
- b. Brick Powder ()
- c. Paste And Brush ()
- d. Tree branches ()

3. Which type of brush you are using

- a. Soft ()
- b. Hard ()
- c. Thick ()
- d. None ()

4. How much paste you are using per brushing ?

- a. Pea Size ()
- b. Mustard size ()
- c. Amla Size ()
- d . Never Used Paste ()

5. How you start the brushing with paste?

- a. Occasionally Wet the Paste and Brush ()
- b. Always Wet the Paste and Brush ()
- c. Never wet the paste and brush ()
- d. Brush and Paste Never Used ()

6. While brushing at which degree you hold the brush against the gum?

- a. 90 degree ()
- b. 45 degree ()
- c. 60 degree ()
- d. 75 degree ()

7 How many minutes you are taking to brush your teeth?

- a. 2 -3 Minutes ()
- b. Less Than 1 Minute ()
- c. 4 -5 Minutes ()
- d. More Than 6 Minutes ()

8. which one is essential while playing unsafely games to avoid dental injury?

- a. Tooth Paste ()
- b. Mouth Guard and helmet ()
- c. Jelly ()
- d. Tooth Cover ()

9. How will you manage the dental problem ?

- a. Self Treatment ()
- b. Traditional Treatment ()
- c. Visit Dentist ()
- d. None ()

10. How many years once you have counseling with dentist ?

a. Every three years ()

b. Every two years ()

c. Every six months ()

d. Never go to dental checkup ()

3/4 Áú 3/4 Åø §° , j00i , ÖÅt

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- . 12 ()
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3. Å3/4ö

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- . , Ö%03/4Å÷ ()
- p. ÓŠÄö ()
- ® . ÅtÉ Å3/4ð3/4Å÷ ()

4. | Åü§Èj÷ , øÅt

- « . Ó · È °jÅjì , øÅt ()
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- p. ÅüÇt pÚ3/4öÅÈö0 Å · Å ()
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5. | ÄüŒËj ÷ | ¾jÆø

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1.ÀøÄî Ä´ ,ü ÄîÐ ?

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¬ .Äjø Àü,ü,îÄ Äü,ü ()

þ.Äjø Àü,ü,¼Äð Äü,ü ()

® .Äjø Àü,ü,§,j Äü,ü ()

2.» jÉô Àø §¼jý Úõ - ò§¼° ÄÄ ±ýÉ ?

« .5 Ä¼ü ü ()

¬ .6 Ó¼ø 7 Ä¼ø ()

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3.Àü,Çî Ä½îÄîÐ ?

« .¬½×ø¼ÄjÕø,Ç « Ä¼ü ()

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4.Àø - Ú¼Äj, þÕì, §¼ ÄðÄî õ¼îÐø¼ÄjÕü ÄîÐ?

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¬ .ò§¼ Äî ()

þ.°ø Äî ()

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5. $\int_{-\infty}^{\infty} \delta(x) dx = ?$

- a. $\frac{1}{2}$ ()
- b. $-\infty$ ()
- c. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ ()
- d. $\frac{1}{\infty}$ ()

6. $\int_{-\infty}^{\infty} \delta(x) dx = ?$

- a. $\frac{1}{2}$ ()
- b. $-\infty$ ()
- c. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ ()
- d. $\frac{1}{\infty}$ ()

7. $\int_{-\infty}^{\infty} \delta(x) dx = ?$

- a. $\frac{1}{2}$ " ± " ()
- b. $-\infty$ " à " ()
- c. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ " ° " ()
- d. $\frac{1}{\infty}$ " Ê " ()

8. $\int_{-\infty}^{\infty} \delta(x) dx = ?$

- a. $\frac{1}{2}$ ()
- b. $-\infty$ ()
- c. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ ()
- d. $\frac{1}{\infty}$ ()

9. $\int_{-\infty}^{\infty} \delta(x) dx = ?$

- a. $\frac{1}{2}$ ()
- b. $-\infty$ ()
- c. $\int_{-\infty}^{\infty} \delta(x) dx = 1$ ()
- d. $\frac{1}{\infty}$ ()

Àççx -p

(Àø Í ,j¾jÃõ - ÀÆÌ ,ÁÆÌ ,í ,û)

1. ´Õ çì Çì Í ±ð¾´´ É ¾¾´´ Á Àø ÐÄì Í ,Æ£,û ?

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¬ . pÃñ Î Ó´´ È ()

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2. Àø ÐÄì , çç ,û ÁÃýÁÎ òÐÁÐ ±Ð?

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3. ±ó¾´´ Á´´ ,ÁjÉ Àø ÐÄì ,ç,´´ Ç ÁÃýÁÎ òÐ ,Æ£,û ?

« . ÁõÐÁjÉÐ ()

¬ . ,ÉÉÁjÉÐ ()

p. ¾ÉÁÉjÉÐ ()

® . Àø ÐÄì ,ç,´´ Ç ÁÃýÁÎ òÐÁÐ pø´´ Ä ()

4. Àø ÐÄì ,Áø ±ùÁÇx ÀüÀ´´ ° ÁÃýÁÎ Ð ,Æ£,û ?

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p. |çøÄç ,Éç« Çx ()

® . ÀüÀ´´ ° ÁÃýÁÎ òÐÁÐ pø´´ Ä ()

5. Àø ÐÄì ,Áø ÀüÀ´´ °´´ Áð¾ÁÆÌ çç

ç´´ ÉòÐÁõÎ Àø ÐÄì Í ,Æ£,çj?

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p. ±ôŞÀjÐõ ç´´ ÉòÀÐ pø´´ Ä ()

® . Àø ÐÄì ,çÁÃýÁÎ òÐÁÐ pø´´ Ä ()

6. Åø ÐÄÏ Ì õŞÄÏ Ð Åø ÐÄÏ Ì Ç Á ±0¼ Ş ÿ ½ð¾0ø

·· Åð Ð Åø ÐÄÏ Ì Ç È ÿ ù ?

- « .90" ()
- ¬ .45" ()
- þ.60" ()
- ®.75" ()

7. ˆÖ ¾¼·· Å ±ð¾·· É ÇÄ¼¼í ÿ ù Åø ÐÄÏ Ì Ç È ÿ ù ?

- « .2 - 3 ÇÄ¼¼í ÿ ù ()
- ¬ .1 ÇÄ¼¼ð¾¼ü Ì ÿ ù ()
- þ.4 -5 ÇÄ¼¼í ÿ ù ()
- ®. 6 ÇÄ¼¼í ÿ ù Ì Ì ŞÅø ()

8. ÄÏ Ð ÿ ðÄü È Ä Ç ÇÄÏ ðÏ Ç Çÿ ŞÄÏ Ð Åø ÿ Äð « ·· ¼Ä·· ¾ ¾Ï Ì ÿ
ÄÄÿÄÏ ÐÄÐ ±Ð ?

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- þ. |føÄç ()
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9. Åø °ðÄð¾0Äð¾ ÄÄÏ°·· É ÿ Ç ±üÄÏÜ ·· ÿ ÄÏÜ Ç È ÿ ù ?

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- ¬ .ÄÄðÄ·· Ä ·· Äð¾¼Äð ()
- þ. Åø ÄÏðÐÄ·· Ä « Ì Ì ŞÄÿ ()
- ® .²Ðð |°öÄ¾¼0ø·· Ä ()

10. ±üÄÇ× ÇÏ ÇÏ Ì ˆÖÓ·· È Åø ÄÏÐÄÏ¼0 Åø

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- ¬ . þÄñ Í Äð¾¼ü Ì ˆÖÓ·· È ()
- þ. ¬ Ü ÄÏ¾ð¾¼ü Ì ˆÖÓ·· È ()
- ® . ±ðŞÄÏÐð þø·· Ä ()

APPENDIX-B

LETTER SEEKING PERMISSION TO CONDUCT STUDY

LETTER SEEKING PERMISSION TO CONDUCT STUDY

From

P.Thirunagalinga Pandiyan

M.Sc Nursing I I Year

College of nursing

Madurai medical college

Madurai

To

THE CORRESPONDENT

Sree Gopala Krishna High School

Siruthur ,Madurai 14

Through The proper channel

Respected sir /Madam

Sub : Requesting permission to conduct the study on **the effectiveness of video assisted instructions regarding dental health among early adolescent at Sree Gopala Krishna High School Siruthur Madurai14 .**

I am second year M.sc., Nursing student of College Of Nursing , Madurai Medical College Madurai In partial fulfillment of Master degree in nursing ,I have selected the above topic for the dissertation to submit to the Dr MGR Medical University Chennai . I request you to kindly give me permission to conduct the study in your school.

Thanking you

Yours sincerely

Date :

Madurai 20

Permitted to research studies.

[Signature]

[Signature] 7/8/2012

தலைமையாசிரியை
ஸ்ரீ கோபால கிருஷ்ணா மேல்நிலைப்பள்ளி
சிறுதுறா, மதுரை-14.

[Signature]
20/12

[Signature]
30/7/12
Principal
College of Nursing
Madurai Medical College
Madurai-20.

APPENDIX – C

ETHICAL COMMITTEE APPROVAL TO CONDUCT THE STUDY

Ref. No. 5336 /E4/3/2012

Govt. Rajaji Hospital,
Madurai, 20. Dated: .08.2012

Institutional Review Board / Independent Ethics Committee.

Dr. N. Mohan, M.S., F.I.C.S., F.A.I.S.,
Dean, Madurai Medical College & 2521021 (Secy)
Govt Rajaji Hospital, Madurai 625020.

Convenor
grhethiesecy@gmail.com.

Sub: Establishment-Govt. Rajaji Hospital, aMadurai-20-
Ethics committee-Meeting Agenda-communicated-regarding.

The Ethics Committee meeting of the Govt. Rajaji Hospital, Madurai was held at 11.00 Am to 1.00Pm on 28.06.2012 at the Dean Chamber, Govt. Rajaji Hospital, Madurai. The following members of the committee have been attended the meeting.

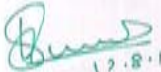
1. Dr.N.Vijayasankaran,M.ch(Uro.) 094-430-58793 0452-2584397	Sr.Consultant Urologist Madurai Kidney Centre, Sivagangai Road,Madurai	Chairman
2. Dr.P.K. Muthu Kumarasamy, M.D., 9843050911	Professor & H.O.D of Medical, Oncology(Retired)	Member Secretary
3. Dr.T.Meena,MD 094-437-74875	Professor of Physiology, Madurai Medical College	Member
4. Dr. S. Thamilarasi, M.D (Pharmacol)	Professor of pharmacology	
5.Dr.Moses K.Daniel MD(Gen.Medicine) 098-421-56066	Professor of Medicine Madurai Medical College	Member
6.Dr.M.Gobinath,MS(Gen.Surgery)	Professor of Surgery Madurai Medical College	Member
7.Dr.S. Dilshadh, MD(O&G) 9894053516	Professor of OP&Gyn Madurai Medical College	Member
8.Dr.S.Vadivel Murugan., M.D, 097-871-50040	Professor of Medicine Madurai Medical College	Member
9.Shri.M.Sridher,B.sc.B.L. 099-949-07400	Advocate, 2, Deputy collectors colony 4 th street KK Nagar, Madurai-20,	Member
10.Shri.O.B.D.Bharat,B.sc., 094-437-14162	Businessman Plot No.588, K.K.Nagar,Madurai,20.	Member
11.Shri. S.sivakumar,M.A(Social) Mphil 093-444-84990	Sociologist, Plot No.51 F,F, K.K Nagar, Madurai.	Member

Following Projects were approved by the committee

Sl. No	Name of P.G.	Course	Name of the Project	Remarks
1.	Thirunagalinga Pandian. P	M.sc Nursing	Video instruction for improving knowledge towards dental health amongst adolescents.	Approved

Please note that the investigator should adhere the following: She/He should get a detailed informed consent from the patients/participants and maintain Confidentially.

1. She/He should carry out the work without detrimental to regular activities as well as without extra expenditure to the institution to Government.
2. She/He should inform the institution Ethical Committee in case of any change of study procedure site and investigation or guide.
3. She/He should not deviate for the area of the work for which applied for Ethical clearance.
She/He should inform the IEC immediately, in case of any adverse events pr Serious adverse reactions.
4. She/he should abide to the rules and regulations of the institution.
5. She/He should complete the work within the specific period and apply for if any Extension of time is required She should apply for permission again and do the work.
6. She/He should submit the summary of the work to the Ethical Committee on Completion of the work.
7. She/He should not claim any funds from the institution while doing the word or on completion.
8. She/He should understand that the members of IEC have the right to monitor the work with prior intimation.


12.8.12
DEAN 1/c


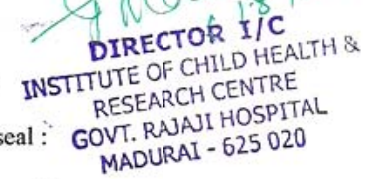
To
All the above members and Head of the Departments concerned.
All the Applicants.

APPENDIX-D

CONTENT VALIDITY CERTIFICATES

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool development by Mr.P.Thirunagalinga Pandiyan Ilyear M.sc Nursing student College Of Nursing , Madurai Medical College Madurai 20 for his topic “effectiveness of video assisted instructions regarding dental health among early adolescent at Sree Gopala Krishna High School Siruthur Madurai14 “ is validated by me and he can be proceed with this tool to conduct the main study.

Signature : 
Name and seal : 
DIRECTOR I/C
INSTITUTE OF CHILD HEALTH &
RESEARCH CENTRE
GOVT. RAJAJI HOSPITAL
MADURAI - 625 020

Date :

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool development by Mr.P.Thirunagalinga Pandiyan Ilyear M.sc Nursing student College Of Nursing , Madurai Medical College Madurai 20 for his topic "**effectiveness of video assisted instructions regarding dental health among early adolescent at Sree Gopala Krishna High School Siruthur Madurai14** " is validated by me and he can be proceed with this tool to conduct the main study.

Signature :



Name and seal :

PRUF- DR. N. VENKADASALAPATHI
Dr. N. VENKADASALAPATHI, M.D.S.,
DIMENSION 4
Dental & Craniofacial Surgery Center
36, Bharathiyar Main Road
K.K. Nagar, MADURAI - 625 020
PATIL
MDS IN

Date :

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool development by Mr.P.Thirunagalinga Pandiyan Iyear M.sc Nursing student College Of Nursing , Madurai Medical College Madurai 20 for his topic "**effectiveness of video assisted instructions regarding dental health among early adolescent at Sree Gopala Krishna High School Siruthur Madurai14** " is validated by me and he can be proceed with this tool to conduct the main study.

Signature :

N. Jeyaraj

Name and seal :

*Associate Professor,
CSI Jeyaraj Annapackkam
College of Nursing,
Madurai.*

Date : *06.06.2012*

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool development by Mr.P.Thirunagalinga Pandiyan Ilyear M.sc Nursing student College Of Nursing , Madurai Medical College Madurai 20 for his topic "**effectiveness of video assisted instructions regarding dental health among early adolescent at Sree Gopala Krishna High School Siruthur Madurai14** " is validated by me and he can be proceed with this tool to conduct the main study.

Signature :

Name and seal :

R. Jathilakshmi
Asso. Professor,
Sacred Heart nursing
college, madurai.

Date :

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool development by Mr.P.Thirunagalinga Pandiyan Iyear M.sc Nursing student College Of Nursing , Madurai Medical College Madurai 20 for his topic "**effectiveness of video assisted instructions regarding dental health among early adolescent at Sree Gopala Krishna High School Siruthur Madurai**" is validated by me and he can be proceed with this tool to conduct the main study.

Signature : 

Name and seal : MATHA COLLEGE OF NURSING
VANDURAM
MADURAI.

Date :

CERTIFICATE OF ENGLISH EDITING

TO WHOM SO EVER IT MAY CONCERN

This is to certify that the dissertation "EFFECTIVENESS OF VIDEO ASSISTED INSTRUCTIONS ON KNOWLEDGE AND PRACTICE REGARDING DENTAL HEALTH AMONG EARLY ADOLESCENTS IN SELECTED SCHOOL MADURAI.", done by Mr. P.Thirunagalinga pandiyan, M.Sc., Nursing II year student, College of Nursing, Madurai Medical College, Madurai - 20 has been edited for English language appropriateness.

Name: *Dr. C. Raja*

Designation: *Associate Professor in English*

Institution: *YADAVA COLLEGE, Madurai-14*

Signature

Dr. C. Raja
Associate Professor and Head
Department of English
Yadava College (Autonomous)
Srinivasarajan Campus, Thirupattur
Madurai-625 014.

CERTIFICATE OF TAMIL EDITING

TO WHOM SO EVER IT MAY CONCERN

This is to certify that the dissertation "EFFECTIVENESS OF VIDEO ASSISTED INSTRUCTIONS ON KNOWLEDGE AND PRACTICE REGARDING DENTAL HEALTH AMONG EARLY ADOLESCENTS IN SELECTED SCHOOL MADURAI.", done by Mr. P.Thirunagalinga pandiyan, M.Sc., Nursing II year student, College of Nursing, Madurai Medical College, Madurai - 20 has been edited for Tamil language appropriateness.

Name: V. MOHAN

Designation: Associate Prof & Head

Institution: Centre for Advanced Tamil Research
Yadava College
Madurai - 625014.


Signature

Dr. V. MOHAN, MA., M.A., M.Phil., Ph.D.,
ASSOCIATE PROFESSOR & HEAD
CENTRE FOR ADVANCED TAMIL RESEARCH
YADAVA COLLEGE (AUTONOMOUS)
(ACCREDITED WITH 'A' GRADE BY NAAC)
MADURAI - 625 014

APPENDIX – F

Hand out, Lesson Plan and pamphlet

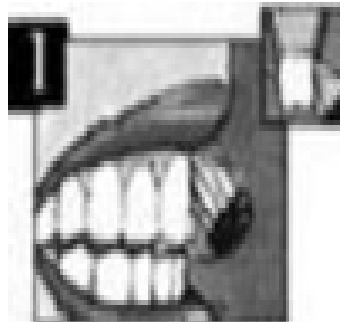
HAND OUT

Àø ÐÄÏ Ì õ Ó´ È

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1. Àø ÐÄÏ ¿´ Ä ®Ú, Ù Ì 45" §, ½ ò ¾ ÀÈ Ì, §Åñ Í õ

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2. Äý Ò « Í ò ¾ 2-3 Àø Õ Ì Ì ¿, ÷ ò ¾ §Åñ Í õ



ဥပမာ 3

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ဥပမာ 4

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ဥပမာ 5

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အောက်ဘက်၊ ပေါ်ဘက်၊ နှစ်ဘက်



HEALTH TEACHING ON DENTAL HEALTH



Guides :

Mrs.S.Poongulazhi, M.Sc.,(N).,M.B.A., Ph.D., Principal I/C,

Mrs .R.Jeyasundari M.Sc (N)., M.A., M.A., M.Phill.,

HOD In Child Health Nursing

Mrs.N.Maheshwari M.Sc.,(N).,

Faculties in Child health nursing

Student Name:

P.Thirunagalinga Pandiyan

II Year M.Sc (N) , College of nursing ,

Madurai Medical College Madurai

HEALTH TEACHING ON DENTAL HEALTH

Introduction:

As with any other part of our child's body, our child's mouth needs to be cleaned regularly to keep it healthy, working properly and looking good. Research is now showing that the health of our mouth affects the health of the rest of our body. If our child's mouth is clean and healthy, the rest of his or her body will be better off too. Oral hygiene needs to start early. This means taking action even before our child gets his or her first tooth.

CENTRAL OBJECTIVE:

The students will gain knowledge and understanding about the dental hygiene and apply this gained knowledge in their day to life for healthy living.

CONTRIBUTORY OBJECTIVES

The students will be able to:

1. define the term dental hygiene
2. narrate the types and functions of teeth
3. explain about bad breath and dental flossing
4. know regarding gum bleeding and its causes
5. mention about the dental carries and dental plague
6. explain about the fluoride and its importance
7. describe the dietary pattern for the dental health
8. enlist the 10 dental health tips

S. No	Contributory objectives	Time	Content	Teacher activity	Learner activity
1	Define the term dental hygiene	2 mts	<p>Definition :</p> <ol style="list-style-type: none"> 1. The practice of keeping the mouth, teeth, and gums clean and healthy to prevent disease, as by regular brushing and flossing and visits to a dentist. 2. The state of one's oral health, resulting from this practice or its neglect. Also called oral hygiene. 	Teaching with Roller board	Learning and asking question
2	narrate the types and functions of teeth	2 mts	<p>Types of teeth:</p> <ol style="list-style-type: none"> 1. Milk teeth Milk usually begin to erupt or cut through the gums at about 6 months of age and ended in 6 years. 2. Permanent Teeth <p>Children typically start to lose their baby teeth and replace them with adult teeth when they are 6 or 7 years .</p>	Teaching with pamphlet	Learning and asking question

S. No	Contributory objectives	Time	Content	Teacher activity	Learner activity
3	explain about bad breath and dental flossing	3 mts	<p>Functions of teeth: 1.grinding the food 2.speech 3.laugh</p> <p>Bad breath or halitosis may indicate a dental problem, but this may not always be the case. Causes: The odour may be caused by factors in the mouth or by changes occurring in other parts of the body. Local factors: ·Decaying food particles on or between the teeth ·A coated tongue covered by growing microorganism. ·Unclean dentures ·Smell of tobacco ·Alcohol · Gum diseases with pus production involved · Healing wounds after a surgery or extraction</p>	Teaching with pamphlet	Listening and clearing doubts

S. No	Contributory objectives	Time	Content	Teacher activity	Learner activity
	explain about bad breath and dental flossing		<p>Dental floss: Even the most careful brushing does not remove all the harmful substances from the crevices between the teeth, areas where even the bristles cannot reach to reach such areas the use of dental floss is recommended which is nothing but a special kind of silk of nylon thread this floss is passed into the space between the teeth with a gentle to and fro sawing motion.</p> <ul style="list-style-type: none"> • Take a piece of floss, approximately 18 inches long, and wrap it around the Middle finger of each hand. You can also tie the ends together in a circle. • With the floss gripped firmly between The thumb and index finger of each hand (hold an approximately half-inch section taut for more control), work the floss gently between the teeth until it reaches the gum. • Curve the floss into a C-shape around the tooth. Slide it up and down the side of the tooth. Remove the floss carefully, and repeat the process for each tooth. 	Teaching with video clippings	Learning and asking question

S.No	Contributory objectives	Time	Content	Teacher activity	Learner activity
4	know regarding gum bleeding and its causes	4 mts	<p>Bleeding gums</p> <p>Bleeding gums is among the common conditions affecting the oral cavity. This problem still continues to affect us even with so many modern facilities available in the field of oral care.</p> <p>The Causes For Bleeding Gums</p> <p>Poor maintenance of the teeth, such as inadequate brushing or failure to rinse the mouth after meals results in a thin layer of food and bacteria covering the tooth surface. This bacterium is the chief culprit behind the inflammation. The gums during the stage of infection become soft, spongy and swollen. Trauma to the gums by hard brushing or tooth picking with sharp objects result in gingival bleeding.</p>	Teaching with pamphlets	Learning and asking question

S.No	Contributory objectives	Time	Content	Teacher activity	Learner activity
5.	mention about the dental carries and dental plaque	5 mts	<p>Dental caries: Cavities or holes in teeth caused by decay are the most common chronic disease. Tooth decay is caused by streptococcus mutants and lactobacillus species that are able to produce lactic acid.</p> <p>Dental Plaque: Dental plaque is a biofilm, usually a pale yellow that develops naturally on the teeth. The mechanisms of plaque formation include</p> <ul style="list-style-type: none"> • Adsorption of proteins and bacteria to form a film on the tooth surface. • The effect of electrostatic forces between microbial surfaces and the film to create reversible adhesion to the teeth. • Irreversible adhesion due to intermolecular interactions between cell surfaces and the pellicle. • Secondary colonizers attach to primary colonizers by intermolecular interaction. • The cells divide and generate a biofilm 	Teaching with pamphlets	Listening and asking doubts

S.No	Contributory objectives	Time	Content	Teacher activity	Learner activity
6	explain about the brushing techniques ,fluoride and its importance	7 mts	<p>Brushing...Step by Step</p> <ul style="list-style-type: none"> • Place bristles along the gum line at a 45-degree angle. Bristles should contact both the tooth surface and the gum line. • Gently brush the outer tooth surfaces of 2-3 teeth using a vibrating back & forth rolling motion. Move the brush to the next group of 2-3 teeth and repeat. • Maintain a 45-degree angle with bristles contacting the tooth surface and gum line. Gently brush using back, forth, and rolling motion along all of the inner tooth surfaces. • Tilt brush vertically behind the front teeth. Make several up & down strokes using the front half of the brush. • Place the brush against the biting surface of the teeth & use a gentle back & forth scrubbing motion. Brush the tongue from back to front to remove odor producing bacteria. 	Teaching with hand out and video clippings	Learning and asking question

S.No	Contributory objectives	Time	Content	Teacher activity	Learner activity
6	explain about the brushing techniques ,fluoride and its importance		<p>What is fluoride?</p> <p>Fluoride is a mineral that is naturally present in varying amounts in almost all foods and water Supplies. Fluoride is also used in many consumer dental products such as toothpaste and fluoride mouth rinses</p> <p>How does fluoride reduce tooth decay?</p> <p>Fluoride acts in two ways: topically and systemically. Topical fluorides strengthen teeth that have already erupted into the mouth. As the fluoride washes over the tooth surface, it is incorporated into the outer surface of the tooth, making it more resistant to decay. Additionally, topical fluoride is used to protect and desensitize root surfaces by providing additional mineralization to the naturally occurring “softer” root surface</p>	Teaching with pamphlet	Learning and asking question

S.No	Contributory objectives	Time	Content	Teacher activity	Learner activity
7	describe the dietary pattern for the dental health	3 mts	<p>It is better to recommend sugar-free snacks.</p> <p>A good list would contain:</p> <p>Fruits: Apples, Oranges, Pears, Bananas</p> <p>Vegetables: Carrots, Celery, Tomatoes, Lettuce, Cucumber, also Nuts, Crisps, Cheese (in cubes), Eggs, Milk, Yogurt.</p> <p>A bad list of food:</p> <ol style="list-style-type: none"> 1. All sugars (including honey) 2. Soft drinks such as colas and lemonades 3. Nearly all cereals 4. Cakes, biscuits and puddings. 5. Jam on your bread, marmalade on your toast. 6. Chocolates, sweets and toffees. 7. Peppermint sweets 	Teaching with video clipping	Learning and asking question

S.No	Contributory objectives	Time	Content	Teacher activity	Learner activity
8	enlist the 10 dental health tips	4 mts	<p>Simple steps to improve dental health</p> <ol style="list-style-type: none"> 1. Choose right tooth brush 2. Choose the right tooth paste 3. Make sure to brush correctly 4. Floss every day 5. Use all the tools at disposables 6. Eat correct foods 7. Don't eat bad foods 8. Keep your teeth white 9. Try some home remedies 10. See your dentist regularly 	Teaching with video clippings	Learning and asking question

Conclusion:

Dental health is the basic for the whole body system health. If we maintain the teeth and gums and tongue properly it will help to long healthy living. Proper brushing, flossing and mouth wash and regular dental checkup is a way to dental health.

THANK YOU ONE AND ALL

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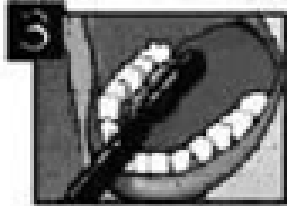

$\hat{A}_j \hat{c}^{\circ}$ $\pm \hat{n}$	$A_i \hat{c}^{\circ}$ $S_{zj} \hat{c}^{\circ}$	$S_{z\hat{A}o}$	$A_{j\hat{A}o}$	$\hat{u} \hat{A} \hat{A}_i \hat{c}^{\circ}$ $\hat{c}^{\circ} \hat{A} o$	$\hat{u} \hat{A} \hat{A}_i \hat{c}^{\circ}$ $\hat{c}^{\circ} \hat{A} o$
1	$\hat{A} o \hat{c}^{\circ}$ $\hat{I} \hat{E} \hat{o} \hat{O} \hat{A} \hat{c}^{\circ}$	2	$\hat{A}_j \hat{o} \hat{c}^{\circ}$, $\hat{A} o \hat{c}^{\circ}$, $\hat{U} \hat{c}^{\circ}$, $S_{\hat{A}_i} \hat{y} \hat{E} \hat{A} \hat{u} \hat{c}^{\circ}$ $\hat{E} \hat{c}^{\circ}$ $\hat{y} \hat{E} \hat{c}^{\circ}$ $\hat{I} \hat{o} \hat{c}^{\circ}$ $\hat{I} \hat{o} \hat{o} \hat{D}$ $\hat{A} o$ $\hat{A} \hat{O} \hat{o} \hat{D} \hat{A} \hat{c}^{\circ}$ $\hat{S} \hat{A}_i \hat{o} \hat{c}^{\circ}$ $\hat{E} \hat{O} \hat{y}$ $\hat{A} \hat{u} \hat{c}^{\circ}$ \hat{C} $S_{zj} \hat{A} \hat{A} \hat{O} \hat{o} \hat{D}$ $\hat{A}_j \hat{D}$ $\hat{I} \hat{o} \hat{A} \hat{D}$ $\hat{A} o \hat{c}^{\circ}$ $\pm \hat{E} \hat{o} \hat{A} \hat{I} \hat{o}$	$\hat{O} \hat{c}^{\circ}$ $\hat{O} \hat{o} \hat{A} \hat{A} \hat{c}^{\circ}$ $\hat{a} \hat{A} \hat{o} \hat{c}^{\circ}$	$\hat{A} \hat{E} \hat{o} \hat{c}^{\circ}$ $\hat{A} \hat{u} \hat{U} \hat{o}$ $\hat{o} \hat{o} \hat{S} \hat{c}^{\circ}$ $\hat{o} \hat{S} \hat{o} \hat{c}^{\circ}$
2	$\hat{A} \hat{u} \hat{c}^{\circ}$ $\hat{A} \hat{c}^{\circ}$ \hat{u} $\hat{A} \hat{u} \hat{U} \hat{o}$ $\hat{A} \hat{y} \hat{c}^{\circ}$ $\hat{U} \hat{U}$	2	$\hat{A} \hat{u} \hat{c}^{\circ}$ $\hat{A} \hat{c}^{\circ}$ <ul style="list-style-type: none"> $\hat{A} \hat{u} \hat{c}^{\circ}$ $\hat{A}_j \hat{o}$ $\hat{A} \hat{u} \hat{c}^{\circ}$, \hat{c}° $\hat{A} \hat{A} \hat{u} \hat{c}^{\circ}$ $\pm \hat{E}$ $\hat{p} \hat{A} \hat{n} \hat{I} \hat{A} \hat{c}^{\circ}$ $\hat{o} \hat{A} \hat{I} \hat{o}$ $\hat{A}_j \hat{o}$ $\hat{A} \hat{u} \hat{c}^{\circ}$ $\hat{O} \hat{c}^{\circ}$ $\hat{A}_j \hat{o}$ $\hat{O} \hat{c}^{\circ}$ $\hat{A} \hat{A} \hat{D} \hat{A} \hat{c}^{\circ}$ $\hat{A} \hat{c}^{\circ}$ $\hat{A}_j \hat{o} \hat{c}^{\circ}$ 20 $\hat{p} \hat{O} \hat{i} \hat{l} \hat{o}$ $\hat{A} \hat{c}^{\circ}$ $\hat{A} \hat{O} \hat{o} \hat{D} \hat{A} \hat{c}^{\circ}$ \hat{o}. $\hat{O} \hat{c}^{\circ}$ \hat{c}° $\hat{A} \hat{A} \hat{u} \hat{c}^{\circ}$ \hat{c}° $\hat{A} \hat{D}$ $\hat{A}_j \hat{u} \hat{c}^{\circ}$ $\hat{A} \hat{c}^{\circ}$ $\hat{O} \hat{c}^{\circ}$ 7 $\hat{A} \hat{A} \hat{c}^{\circ}$ $\hat{S} \hat{c}^{\circ}$ $\hat{y} \hat{U} \hat{o}$. $\hat{A} o$ $\hat{p} \hat{c}^{\circ}$ $\hat{A} \hat{O} \hat{A} \hat{c}^{\circ}$ $\hat{E} \hat{O} \hat{i} \hat{l}$ 28 $\hat{p} \hat{O} \hat{i} \hat{l} \hat{o}$ $\hat{O} \hat{D} \hat{o}$ $\hat{p} \hat{c}^{\circ}$ $\hat{A} \hat{O} \hat{A} \hat{o} \hat{c}^{\circ}$ \gg $\hat{I} \hat{E} \hat{o} \hat{A} o$ $\hat{A} \hat{c}^{\circ}$ $\hat{A}_j \hat{o}$ $\hat{A}_j \hat{o} \hat{c}^{\circ}$ $\hat{A} o$ 32 $\hat{p} \hat{O} \hat{i} \hat{l} \hat{o}$. 	$\hat{D} \hat{n} \hat{I} \hat{A} \hat{c}^{\circ}$ $\hat{a} \hat{A} \hat{o} \hat{c}^{\circ}$	$\hat{A} \hat{E} \hat{o} \hat{c}^{\circ}$ $\hat{A} \hat{u} \hat{U} \hat{o}$ $\hat{o} \hat{o} \hat{S} \hat{c}^{\circ}$ $\hat{o} \hat{S} \hat{o} \hat{c}^{\circ}$

$\hat{A}_j \hat{c}^{\circ}$ $\pm \hat{n}$	$\hat{A}_i \hat{c}^{\circ}$ $\hat{s}_z \hat{i} \hat{c}^{\circ}$	$\hat{s}_z \hat{A} \hat{o}$	$\hat{A}_j \hat{c}^{\circ}$	$\hat{u} \hat{A} \hat{A}_j \hat{c}^{\circ}$	$\hat{u} \hat{A} \hat{A}_j \hat{c}^{\circ}$
<p>3</p>	<p> $\hat{A} \hat{u} \hat{c}^{\circ}$ $\hat{A} \hat{u} \hat{U} \hat{o}$ $\hat{A} \hat{1} \hat{2} \hat{c}^{\circ}$ </p> <p> $\hat{A}_j \hat{o} \hat{D} \hat{z} \hat{i} \hat{u} \hat{E} \hat{o}$ $\hat{A} \hat{u} \hat{U} \hat{o} \hat{o} \hat{A}_j \hat{o}$ $\hat{A} \hat{u} \hat{E} \hat{c}^{\circ}$ </p>	<p>3</p>	<p> $\hat{A} \hat{u} \hat{c}^{\circ}$ $\hat{A} \hat{u} \hat{U} \hat{o}$ </p> <ul style="list-style-type: none"> $\hat{A} \hat{o} - \frac{1}{2} \times \hat{o} \hat{A}_j \hat{O} \hat{c}^{\circ} \ll \hat{A} \hat{i} \hat{c}^{\circ}$ $\hat{s} \hat{A} \hat{I} \hat{A} \frac{3}{4} \hat{u} \hat{i} \hat{l} \hat{o}$, $\hat{o} \hat{c}^{\circ} \hat{A} \frac{3}{4} \hat{u} \hat{l} \hat{o} \hat{A} \hat{A} \hat{y} \hat{A} \hat{I} \hat{c}^{\circ} \hat{E} \hat{D}$. $\hat{A} \hat{u} \hat{c}^{\circ} \hat{I} \hat{u} \hat{E} \hat{c}^{\circ} \pm \hat{E} \hat{A} \hat{o} \pm \hat{E} \hat{o} \hat{A} \hat{I} \hat{o}$ $\hat{A} \hat{n} \hat{c}^{\circ} \hat{A} \hat{A}_j \hat{E} \hat{c}^{\circ} \hat{E} \hat{c}^{\circ} \hat{u} \hat{c}^{\circ} \hat{D}$. $\hat{A} \hat{u} \hat{c}^{\circ} \hat{z} \hat{A} \hat{o} \hat{o} \hat{A} \hat{u} \hat{U} \hat{o} \hat{A} \hat{o} \frac{3}{4}$ $\hat{I} \hat{E} \hat{i} \hat{o} \hat{c}^{\circ} \hat{A}_j \hat{E} \hat{D} \ll \frac{3}{4} \hat{E} \hat{i} \hat{o} \frac{3}{4} \hat{y} \hat{A} \hat{A} \hat{c}^{\circ}$ $\hat{Y} \hat{I} \hat{s} \hat{A}_j \hat{y} \hat{u} \hat{E} \hat{A} \hat{u} \hat{c}^{\circ} \hat{E} \hat{c}^{\circ} \hat{o} \hat{A}_j \hat{o} - \frac{1}{2} \hat{A}$ $\hat{O} \hat{E} \hat{c}^{\circ} \hat{E} \hat{D}$ <p> $\hat{A}_j \hat{o} \hat{D} \hat{z} \hat{i} \hat{u} \hat{E} \hat{o}$ </p> <ul style="list-style-type: none"> $\hat{A} \hat{u} \hat{c}^{\circ} \hat{o} \hat{c}^{\circ} \hat{A}_j \hat{c}^{\circ} \hat{A} \hat{A}_j \hat{A}_j \hat{c}^{\circ} \hat{A} \frac{1}{4} \hat{i} \frac{3}{4} \hat{i} \hat{O} \hat{o}$ $-\frac{1}{2} \times \hat{o} \hat{A}_j \hat{O} \hat{u} \hat{A} \hat{u} \hat{c}^{\circ} \hat{U} \hat{i} \hat{l} \hat{p} \hat{c}^{\circ} \frac{1}{4} \hat{A} \hat{o}$ $\frac{3}{4} \hat{i} \hat{l} \hat{A} \frac{3}{4} \hat{i} \hat{O} \hat{o}$, $-\frac{1}{4} \hat{A} \hat{c}^{\circ} \hat{N} \hat{c}^{\circ} \hat{A} \hat{A} \hat{A} \hat{o} \hat{A} \hat{u} \hat{U} \hat{o} - \frac{1}{4} \hat{o}$ $\hat{A} \hat{A}_j \frac{3}{4} \hat{c}^{\circ} \hat{c}^{\circ} \hat{E} \hat{i} \hat{O} \hat{o} \hat{A}_j \hat{o} \hat{D} \hat{z} \hat{i} \hat{u} \hat{E} \hat{o}$ $\hat{z} \hat{u} \hat{A} \hat{I} \hat{o}$. 	<p> $\hat{D} \hat{n} \hat{I} \hat{A} \hat{c}^{\circ} \hat{A} \hat{P}$ $\hat{a} \hat{A} \hat{o} \hat{u} \hat{A} \hat{o} \frac{3}{4} \hat{o}$ </p>	<p> $\hat{A} \hat{E} \hat{o} \frac{3}{4} \hat{o} \hat{A} \hat{u} \hat{U} \hat{o}$ $\hat{o} \hat{o} \hat{s} \frac{3}{4} \hat{o} \hat{s} \hat{o} \frac{3}{4} \hat{o}$ </p> <p> $\hat{A} \hat{E} \hat{o} \frac{3}{4} \hat{o} \hat{A} \hat{u} \hat{U} \hat{o}$ $\hat{o} \hat{o} \hat{s} \frac{3}{4} \hat{o} \hat{s} \hat{o} \frac{3}{4} \hat{o}$ </p>

A _j ° ±ñ	Ar Ç00 Sziĭ,ĭ,ü	SzĀō	A _j ¼ō	ūÄ0AA _j Ŷ °Äø	ūÄÄ± °Äø
	<p> Ā_jö ð÷ziüÈō ÄüÜō ÖÄ_j°ĭĭ' ÄüÈø ÄÇĭĭ </p>		<p> ðÄ_j°ĭĭ: ÇÿË_j Äø ÐÄĭ ÇÄ_jø Í ð¾ō °ö¾ĭÖō Äü Üĭĭ p[°]¼Äø - ūÇ[°] Ä[°] Ç Çĭ ÖÉÄ_jð. ±ÉŞÄ á ø ŞÄ_jÿËÄüË_jø Äü[°] Ç Í ð¾ō °ö0ō Ó[°] Èĭĭ 'ÖÄ_j°ĭĭ' ±ÿÜ ÄÄ±. </p> <p> ðÄ_j°ĭĭ °ö0ō Ó[°] È: </p> <ul style="list-style-type: none"> ÍÄ_j± 18 pÿĭ ÇÇÖüÇ á[°] Ä ±ĭ ððĭ,üÇ ŞÄñ ĭō pÄñ ĭ[°] Çÿ Çĭ ÄÄÖĭ[°] ¼ŞÄ Ş_j±ððĭĭ,üÇ ŞÄñ ĭō Ç ÄÉÄø Äü Üĭĭ p[°]¼Äø á[°] Ä ÄÐÄ_j ÖÿÜō ÄÿÜō pÄĭ ŞÄñ ĭō pùÄ_jÜ ūÄ_jÜ Äü Üĭĭ p[°]¼ÄÖō °öÄŞÄñ ĭō 	<p> ÇÖō ÄÖ¼ÿ ÜÉÄ Ä¼ō ä Äō ūÄ0¾ø </p>	<p> ÄÉ0¾ø ÄüÜō öó¾,ö Ş,ö¾ø </p>

$\hat{A}_j \hat{c}^{\circ}$ $\pm \hat{n}$	$A_r \hat{c}^{\circ}$ $S_{zj} \hat{c}^{\circ}$	$S_{z\hat{A}o}$	$A_j \hat{c}^{\circ}$	$\hat{u} \hat{A} \hat{A}_j \hat{c}^{\circ}$	$\hat{u} \hat{A} \hat{A}_j \hat{c}^{\circ}$
4	$\hat{A} \hat{E} \hat{c}^{\circ}$ $\hat{A} \hat{E} \hat{c}^{\circ}$ $\hat{A} \hat{E} \hat{c}^{\circ}$	4	$\hat{A} \hat{E} \hat{c}^{\circ}$ <ul style="list-style-type: none"> $\hat{A} \hat{E} \hat{c}^{\circ}$ $\hat{A} \hat{E} \hat{c}^{\circ}$ $\hat{A} \hat{E} \hat{c}^{\circ}$ $\hat{A} \hat{E} \hat{c}^{\circ}$ 	$\hat{A} \hat{E} \hat{c}^{\circ}$ $\hat{A} \hat{E} \hat{c}^{\circ}$	$\hat{A} \hat{E} \hat{c}^{\circ}$ $\hat{A} \hat{E} \hat{c}^{\circ}$

A _i ç ^o ±ñ	Ar ç ^o ð S _i l r u	S _i Äö	A _i ¼ö	üAA _i ÿ °Aø	üAA± °Aø
6	Àø ÐÄì Ì õ Ó ^o È ÁüÜõ ØŞç _i ÄÏ Õì ÄòÐÄõ ÄüÈÄÇì Ì	7 ç ^o Äç ¼Ä ü	Àø ÐÄì Ì õ Ó ^o È ç ^o Ä 1 1. Àø ÐÄì ç ^o Ä ®Ü Ü Ì Ì 45" Ş _i ½ò¾ø ÄÈì ŞÄñ Ì õ 2. Àø ÐÄì Äÿ à ç ^o ü Àø ÁüÜõ ®Ü ç ^o ç ^o ÷óÐ ÞÕì ŞÄñ Ì õ  ç ^o Ä 2 1. ÄÇòðÈ Äì ¾Äç 2-3 ÄøÄç, Àø ÐÄì ç ^o Ä Óÿ Üõ Äÿ Üõ Äø¼ÄÈÄÿ 3-4 ¾¼Ä Ä ÞÄì ŞÄñ Ì õ. 2. Äÿ ð « Ì õ¾ 2-3 ÄøÕì Ì ç ^o ÷ò¾ ŞÄñ Ì õ 	 ç ^o ÄÄ¾ç ä Äõ ÄÇì Ì ¾ø	ÄÈò¾ø ÁüÜõ ðóŞ¾ õ Ş õ¾ø

<p>Äjč° ±ñ</p>	<p>Ar ,Ç00 Sził ,ı ,ü</p>	<p>SzÄö</p>	<p>Äj¼ö</p>	<p>üÄ0ÄÄjŸ °Äø</p>	<p>üÄÄ÷ °Äø</p>
	<p>Äø ÐÄì Ì õ Ó° È ÄüÜõ ÒŞÇj° ÄĪ Òì ĀòÐÄõ ÄüÈĀÇì Ī ,</p>		<p>č° Ä 3</p> <p>1. 45 " S ,j ½ò¾ø ÄøÄŸ - ð0Èõ ÓýÜõ ÄŸÜõ Åð¼ÄĒÄĀj , þÄì , ŞÄñ Ī õ</p>  <p>č° Ä 4</p> <p>1. Äø ÐÄì Ā Ä Óý Äü Üì Ī ÄŸ0Èõ °í Ī ð¾j , ¾00Ä ŞÄñ Ī õ</p> <p>2. Äø ÐÄì ĀŸ Óý Äj¾Äjø ÄÄ ¾¼° Ä ŞÄ0õ , ðõ þÄì , ŞÄñ Ī õ</p> 	<p>° ðÄ¾¾ ā Äõ ÄÇì Ī ¾ø</p>	<p>ÄÉ ð¾ø ÄüÜõ °óŞ¾ , õ Ş , ð¾ø</p>

Äjç° ±ñ	Ar, Çøø Sził, í, ú	SziÄö	A _j ¼ö	üÄøÄÄjŸ °Äø	üÄÄ÷ °Äø
7	Äü, Üìì çŸ° Ä ÄüÜö §, î - ñ ¼jìì ö - ½xö ÄjÖö, ü ÄüÉç ÄÄjç	3 çÄç ¼í ü	Äü, Üìì çŸ° Ä - ñ ¼jìì ö - ½xö ÄjÖö, ü: • - öÄü, • - Äí î, • Äj° ÄöÄö • §, Äö, ¾í, çç, • Äüçjç, çjç, • Öö° ¼, • Äjç. Äü, Üìì §, î - ñ ¼jìì ö - ½xö ÄjÖö, ü: 1. « ° ÉòÐ pÉøø Ä° , ü (§¾Ÿ - öÄ¼) 2. ì çç ÄjÉí , ü 3. §, ì, Äç, ö, 4. f j ö 5. ° j Äö	ççö Äö¼Ÿ ÜÉÄ Ä¼ö ä Äö üÄö¾ø	ÄÉö¾ø ÄüÜö öö¾, ö §, ö¾ø

ÓÊx" Ā

Àø ¿Äõ ÓØ - ¼ø - ŠĀjì ¿Àð¾Ūl « ÊôĀ" ¼ - ¾ĀĀjĭ õ.Àø ÁüÚõ ®Ú " Ç Ó" ÈĀj, ŠĀĪ Ā¾ý ã Äõ ¿ñ ¼
¿jÛ ¿ĀĀj, ĀjÆĀjõ.°jĀj, Àø ĐĀĭĭ ¾ø,ÒĀj°Ū ĭ |°ø¾ø,Àø ÁÕðĐĀjŸ - ŠĀj°" É ã Äõ Àü, " Ç ĀjĐĭ, Ājõ.

« " ÉĀÕĭĭ õ ¿ýÈ†

APPENDIX – H
PHOTOGRAPHS



STUDY SETTING

(Sri Gopalakrishana Higher Secondary School Sivathur Madurai 14)



INTERVENTION GIVEN BY INVESTIGATOR



INVESTIGATOR EXPLAINING BRUSHING TECHNIQUE

