"A STUDY ON RISK ASSESSMENT AND MANAGEMENT OF DENTAL CARIES AMONG PRIMARY SCHOOL CHILDREN IN SELECTED SCHOOLS OF KOLAR TALUK"

BY

MS. BLESSY SHIJU, MS. CHRISTA ANN JOSEPH, MS. CHRISTEENA THANKACHAN, MR. DEVARAJ VR, MS. LAKSHMI PARVATHY, MS. LATHASHREE S, MS. LIVYAMOL CJOSEPH, MS. RIYA ANNA SAMUEL, MS. RIYA RAPHEAL, MS. ROSEMARIYA BIJU, MS. VAISHNAVI KM, MS. SIREESHA S R

Research Project Submitted to

Sri Devaraj Urs College of Nursing, Tamaka, Kolar

In partial fulfillment of the requirement for the degree of

BASIC BSC NURSING

Under the guidance of

MS SUMANA YESU PRIYA S H

Assistant professor

Sri Devaraj Urs College of Nursing, Tamaka,

Kolar-563101

Karnataka

2023

DECLARATION OF THE CANDIDATES

We hereby declare that this Research project work **"A STUDY ON RISK ASSESSMENT AND MANAGEMENT OF DENTAL CARIES AMONG PRIMARY SCHOOL CHILDREN IN SELECTED SCHOOLS OF KOLAR TALUK"** is a bonafide and genuine work carried out by Community Health Nursing research group student under the guidance of **MS. SUMANA YESU PRIYA SH,** Assistant professor, Department of Community Health Nursing, Sri Devaraj Urs College of Nursing, Tamaka, Kolar.

Date:

Place: **Signature of the Candidate**

1. Ms Blessy Shiju
2. Ms Christa Ann Joseph
3. Ms Christeena Thankachen
4. Mr Devaraj VR
5. Ms Lakshmi Parvathy
6. Ms Lathashree S
7. Ms Livyamol C Joseph
8. Ms Riya Anna Samuel
9. Ms Riya Raphael
10. Ms Rose Maria Biju
11. Ms Vaishnavi KM
12. Ms Sireesha SR

CERTIFICATE BY THE GUIDE

This is to certify that the Research project work entitled **"A STUDY ON RISK ASSESSMENT AND MANAGEMENT OF DENTAL CARIES AMONG PRIMARY SCHOOL CHILDREN IN SELECTED SCHOOLS OF KOLAR TALUK"** is a bonafide research work done by **MS. BLESSY SHIJU, MS. CHRISTA ANN JOSEPH, MS. CHRISTEENA THANKACHAN, MR. DEVARAJ VR, MS. LAKSHMI PARVATHY, MS. LATHASHREE S, MS. LIVYAMOL CJOSEPH, MS. RIYA ANNA SAMUEL, MS. RIYA RAPHEAL, MS. ROSEMARIYA BIJU, MS. VAISHNAVI KM AND MS. SIREESHA S R** in partial fulfillment of the requirement for the Basic BSc Nursing in Community Health nursing.

Signature of the Guide

Ms. Sumana Yesu Priya S H
Assistant professor
Dept. of. CHN
SDUCON
Tamaka, Kolar.

Date:

Place:

ENDORSEMENT BY THE HOD/ HEAD OF THE INSTITUTION

This is to certify that the Research project work entitled **"A STUDY ON RISK ASSESSMENT AND MANAGEMENT OF DENTAL CARIES AMONG PRIMARY SCHOOL CHILDREN IN SELECTED SCHOOLS OF KOLAR TALUK"** is a bonafide research work done by **MS. BLESSY SHIJU, MS. CHRISTA ANN JOSEPH, MS. CHRISTEENA THANKACHAN, MR. DEVARAJ VR, MS. LAKSHMI PARVATHY, MS. LATHASHREE S, MS. LIVYAMOL CJOSEPH, MS. RIYA ANNA SAMUEL, MS. RIYA RAPHEAL, MS. ROSEMARIYA BIJU, MS. VAISHNAVI KM AND MS. SIREESHA S R** under the guidance of **MS. SUMANA YESU PRIYA SH,** Assistant professor, Department of Community Health Nursing, Sri Devaraj Urs College of Nursing, Tamaka, Kolar, in a partial fulfillment of the requirement for the basic BSc Nursing.

Signature of the HOD

Mrs. Malathi K V
HOD of CHN
SDUCON
Tamaka, Kolar.

Date:
Place:

Signature of the Principal

Dr. G Vijayalakshmi
Principal
SDUCON
Tamaka, Kolar.

Date:
Place:

ACKNOWLEDGEMENT

“Put God first and he will crown your efforts with success”

We raised our humble profound gratitude to God Almighty, the one who give us the opportunity to achieving our goal. He guided us, strengthened us, and enlightened us, at every step for the successful completion of the study.

Our sincere and heartfelt thanks to, Research guide, **MS. SUMANA YESU PRIYA SH,** Assistant professor, Department of Community Health Nursing, Sri Devaraj Urs College of Nursing, who deserve respect and gratitude for the guidance support and an out source of inspiration throughout the study.

We thank **Dr. G. Vijayalakshmi**, principal of Sri Devaraj Urs College of Nursing who provided us the learning atmosphere and for the constant support to conduct the study.

We express our gratitude to all **HODs** and **faculty** of Sri Devaraj Urs College of Nursing for their guidance, support and valuable suggestions.

We express our thanks to **Mr. Ravishankar**, statistician, SDUMC for guiding us in statistical analysis.

Our special word of thanks to the librarians of Sri Devaraj Urs College of Nursing for their constant and timely help in literature search.

We express our sincere gratitude to the study participants who had spent their generous time and cooperation by participating in research study.

RESEARCH ABSTRACT

BACKGROUND

From the standpoint of child psychology, a healthy smile is conducive to how children start building up interpersonal relationship and self-esteem. On the basis of research by AAPD standardized tool, the second most progressive disease among 6-10 yrs children is dental caries after worm infestation. The conduction of proper awareness program me and health education along with risk assessment, management by using standardized tool will help to assess the risk and prevent the chances of dental caries by standardized management.

STATEMENT OF THE PROBLEM

"A STUDY ON RISK ASSESSMENT AND MANAGEMENT OF DENTAL CARIES AMONG PRIMARY SCHOOL CHILDREN IN SELECTED SCHOOLS OF KOLAR TALUK"

OBJECTIVES OF THE STUDY

1. To assess the risk of dental carries by using standardised tool American Academy of Paediatric Dentistry [AAPD]
2. To determine effects of dental carries management using AAPD tool for school children [period of three months]

METHODS

An Experimental study was conducted among 60 primary school children aging 6-10 years. Simple Random Sampling Technique was used based on the criteria used for selection of sample. Here, 60 samples will be randomly selected in which 30 samples will be considered as study group and 30 samples will be considered as control group. The risk of dental caries will be assessed individually by using standard tool of AAPD

and the intervention will be administered based on the level of exposure to risk of developing dental caries. 20-30min will be spent with each of the children.

RESULTS

Data was analyzed and found that there is a reduction in risk of dental caries.

Pre-test: In experimental group- 10% of children are in high risk, 60% of children are in moderate risk and 30% of children are in low risk. In control group-56.7% of children are in high risk, 33.4% of children are in moderate risk and 10% of children are in low risk.

Posttest: In experimental group- 0% of children are in high risk, 10% of children are in moderate risk and 90% of children are in low risk. In control group-56.7% of children are in high risk, 33.4% of children are in moderate risk and 10% of children are in low risk.

As per above analysis we found that there is an improvement in intervention/ experimental group.

INTERPRETATION AND CONCLUSION

The overall finding of the study showed that the risk of dental caries was managed by standardized AAPD tool. The experience of the researcher during the study helped to give suggestions and further recommendations for future research on dental caries and its risk assessment and management.

KEY WORDS

Risk assessment, management, dental caries, school children, standardized tool.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ANNEXURES

CHAPTER 1

INTRODUCTION

CHAPTER 1

INTRODUCTION

‘*Some tortures are physical and some are mental, but the one that is both is dental’*

- ***Ogburn Nash***

Teeth are hard, mineral-rich structures which are born on the jaw that aids in the prehension and mastication of food. Oral health is the state of the mouth, teeth and orofacial structures that enables individuals to perform essential functions and encompasses psychosocial dimensions such asself-confidence, well-being and the ability to socialize and work without pain, discomfort and embarrassment.[1]

According to the World Health Organization [WHO], ‘Dental carries is defined as the destruction of the enamel of the tooth by acids produced by the action of bacteria on sugar.[1] It is one of the most prevalent diseases in human affecting 97% of the population worldwide during the lifetimes. [2]

Dental caries is a complex illness that results from the interplay of specific caries risk variables such as saliva composition, fluoride exposure, and dietary components with acid-genic bacteria biofilm. Insufficient preventive measures and a lack of health education have a significant impact on children's health in the USA, with dental carries being the most frequent chronic disease of children.[2]

The 2004 National Health Survey was a comprehensive study. Children in India have a 53.8% prevalence of dental caries.

Dental carries are caused by a complicated interplay of variables including food, time, bacteria, and host vulnerability. The combination of bacteria and a sweet diet produces acid products that cause dental cavitation.[3].

The following are some prevalent cavity types and their locations:

- **Smooth surface**: The tooth enamel is dissolved by this slowly expanding hollow. With good dental hygiene, you can stop it and occasionally even reverse it. This type of tooth decay occurs most frequently in people in their 20s between their teeth.
- **Pit and fissure decay**: Cavities develop on the upper portion of the chewing surface of your teeth. Your rear teeth's front surfaces may also be affected by decay. Deterioration of pits and fissures usually initiates in adolescence and it advances rapidly.
- **Root decay**: Individuals with receding gums are at a higher risk of developing root decay. Teeth roots exposed to dental plaque and acid are caused by gum recession. It's challenging to stop and cure root deterioration. (If you often experience gum recession, inquire whether an appointment should be scheduled with a periodontist)

The escalation of dental decay in children is notably linked to the excessive consumption of sugary food, diminished oral hygiene habits, decreased access to fluoride, and inadequate utilization of dental care services. Insufficient attention

to oral hygiene can trigger tooth decay, disrupting the progression and positioning of secondary teeth. This can lead to complications including toothaches, inflammation of pulp, loss of teeth, discoloration happening in teeth.[3]

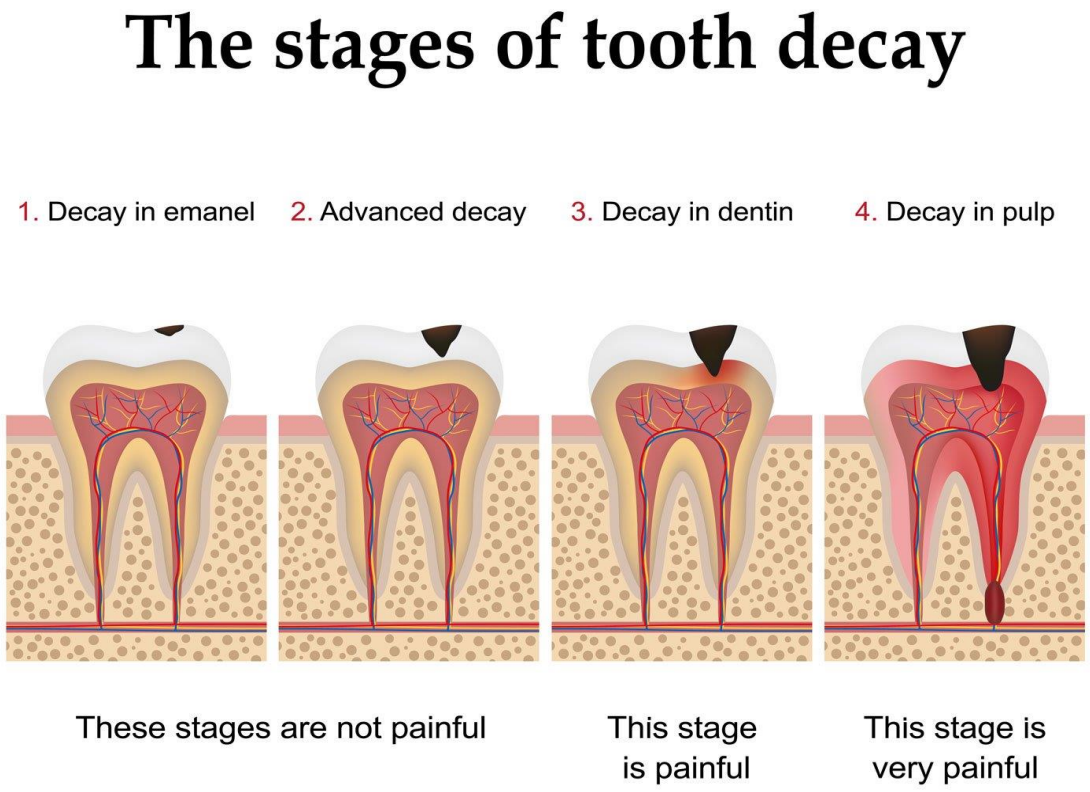


Figure 1: Schematic representation of stages of tooth decay

Between 60% and 90% of school-age children worldwide are thought to have dental health issues; this translates to six to ten children out of ten having dental decay. Tooth loss, discoloration, and damage to teeth can cause youngsters to struggle with eating, sleeping, playing, completing schoolwork, and communicating effectively. The physical development, self-esteem, and social growth of children may be impacted.[3]

Dental care costs 20% of out-of-pocket costs and account for 5% of overall health expenditures in high-income nations. For parents of children impacted by dental caries, the financial burden is substantial. Dental caries is becoming more common among children in low- and middle-income nations.[3]

Conventional strategies for managing dental caries have prioritized treating its symptoms rather than addressing the core problem. We advocate for progressive approaches such as personalized risk evaluation, active monitoring, preventive measures, and strategic management. In addition to facilitating physical sustenance, a healthy mouth fosters social connection, self-worth, and emotions of overall wellbeing.[3]

Dental caries is one health issue that schools have a significant role in promoting and executing. Due to students' easy access to schools, schools are the best places to conduct comprehensive healthcare initiatives.

Given this context, the aim of this investigation was to evaluate the risk of dental caries among school-attending children aged 6 to 10 years, employing the American Academy of Pediatric Dentistry (AAPD) assessment tool. The identification of risk factors will facilitate the recommendation of interventions to lower the prevalence of dental cavities.[4]

NEED FOR THE STUDY

According to WHO dental caries defined as the destruction of the enamel layer of the tooth by acids produced by the action of bacterial on sugar. The results of the global burden of disease study released by Lancelet in 2017 showed that among 328 diseases, the prevalence of permanent dental caries ranked first and the incidence ranked second.[1]

Around 3.5 billion individuals worldwide are thought to be impacted by oral illness. Dental caries, which cause acid production in the teeth and cause tooth cavitation, affect about 2.4 billion people worldwide, or 36% of the total population.1. It is believed that between 60% and 90% of school-aged children worldwide suffer from dental caries. This indicates that dental decay affects 5 to 9 out of every 10 children.[3].

The WHO (2013) reported that the prevalence of tooth decay was greater in urban areas (33.1%) compared to rural areas (30.1%), in females (35.7%) compared to men (27.9%), and in those aged 14 (33.9%) compared to those aged 13 (28.5%). The age group as a whole as well as the ages of five, twelve, and fifteen separately underwent the random-effects meta-analysis.[1].

The goal of the UNICEF (United Nations International Children Emergency Fund) study on dental caries was to look at global trends in the frequency and intensity of dental caries over a 35-year period in three developing countries. They employed

techniques such as an internet database to locate 130 epidemiological studies and diagnostic criteria of caries, which were published in between years 1970 and 2004 among children aged 5 to 6 and 11 to 13 years old.[5]

UNICEF supports equipping modern dental offices with comprehensive diagnostic and treatment techniques such as

- ✓ Mouth Mirror
- ✓ Explorer
- ✓ Periodontal Probe
- ✓ Programmable Electrical Dental Chair

World Bank estimated ECC (Early Childhood Caries) prevalence data for around 193 United Nations Countries from studies published in between years 2007 to 2017.The study assessed the association of wealth, Dentist availability and toothpaste sales with the dental health of 12 years old children.[5]

Seyed-Ali Sadegh Zadeh conducted an experimental investigation on five-year-old youngsters. This technology is a vital resource for assessing dental caries risk. The purpose of machine learning classification techniques and their evolution as computational models. They looked into children's lifestyle choices and their propensity for dental caries. With an accuracy of 97.4%, multilayer perception and random forest emerged as the most effective applied visual learning algorithms. Extreme Gradient Boosting had an accuracy of 94.9%, whereas support vector machines with RBF Kernal had a 97.4% accuracy rate. The results of this study demonstrate the potential for routine expert caries risk screening of children and the determination of dental caries risk scores for each individual.[6]

Anusha R studied dental caries and risk evaluation in kids between the ages of 6

and 10. The aim of the investigation was to employ an appraisal tool furnished by the American Dental Association to determine the dental caries risk among schoolchildren in Chennai city, aged 6 to 10. 152 school-age children, questionnaire for adults over six that was provided by the American Dental Association in 2009 was used. The study comprised 152 children, 98 of whom were male (64.5%) and 54 of whom were female (35.5%), with a mean age of 8.0 + 1.4 years. 2.0% is categorized as low. 40.8% moderate, 57.2% elevated.[7]

Dental caries is a result of human progress and is becoming more and more of a concern for society due to its great potential for morbidity. It can hinder a child's ability to function, be physically fit, and have an attractive quality. Frequently, this has early effects on child's overall health. Due to its complex nature, the disease burden may be reduced by early detection of individuals or populations who are more susceptible for caries and by focused preventive intervention.[4]

An essential first step in making decisions and organizing a course of treatment is risk assessment. For the Indian population, there are no appropriate instruments accessible. AAPD (American Academy of Pediatric Dentistry) is a chair side tool for carries risk assessment and management.[4]

Increase in caregiver's knowledge on oral health through intervention like motivation, intervening anticipatory guidance, preventive as well as restorative intervention and management based on classification based on risk has potential to improve child oral health via behavioral change with respect to diet and oral hygiene behaviors, especially in indigenous population.[6]

Intervention must be culturally appropriate and involve community in design and implementation. Poor health and untreated dental caries in childhood can impacts

healthy growth and development.[3]

A child's severe dental caries had a detrimental effect on family life. It has been demonstrated that parents of children with severe dental caries take longer time off work, report that their child needs more care, experience guilt or stress, disturb their typical routines, and feel guilty.[8]

According to Lee and Divaris (2014), socioeconomic status is one of the most potent upstream determinants of children's poor oral health. Behaviour, diet, feeding, practice, and individual factors involved in Cario genesis can all be effectively targeted by providing primary school students with resources, even if those resources are scarce

A higher level of parental education boosted the carrier's probability of having free children. The area where people live, taking into account their geographic location and socioeconomic development, is another significant element. In situations where health spending is constrained, focusing on persons at higher risk can improve cost effectiveness.[10]

One significant factor influencing total physical aesthetics is dento facial aesthetics. A healthy grin is beneficial for children's development of interpersonal relationships and self-esteem, according to child psychology. There are drawbacks to dental caries or deformities of the face. psychological repercussions impairing their speech.[11]

Researches based on standardized tool along with the clinical and home remedial method, in a collective manner to halt the second most progressive disease among Preschool children after worm infestation is given a great initiative. It could affect

the behavior as well as self -esteem of student who otherwise hide that beautiful smile within themselves.[12]

Therefore, a combined and comprehensive approach with proper awareness, education along with risk assessment and classification of children into various grades using a reliable, valid, chained and economical standardized tool for risk assessment and management is indeed the need of the hour for both pediatric and general dentist worldwide.[13]

STATEMENT OF THE PROBLEM

A STUDY ON RISK ASSESSMENT AND MANAGEMENT OF DENTAL CARRIES AMONG PRIMARY SCHOOL CHILDREN IN SELECTED SCHOOLS OF KOLAR TALUK.

OBJECTIVES OF THE STUDY;

3. To assess the risk of dental carries by using standardised tool American Academy of Paediatric Dentistry [AAPD]

4. To determine effects of dental carries management using AAPD tool for school children [period of three months]

OPERATIONAL DEFINITION

1. **Risk Assessment; -** In this study, it refers to the procedure to predict future carries development before the clinical onset of the diseases.
2. **Management; -** In this study, it refers to the intervention and proper oral hygiene to prevent dental carries.

3. **Dental Caries; -** In this study it refers to the infectious condition that deteriorates the structure of teeth.
4. **School Children; -** In this study conducted, it refers to children who are at risk for dental caries aging between 6year to 10years.
5. **Standardised tool; -** In this study we are using AAPD standardised tool. It is used to recognize the caries – risk assessment and management protocols of dental caries.

CHAPTER 2

REVIEW OF LITERACTURE

CHAPTER-II

REVIEW OF LITERATURE

The investigator has studied the following literature, which is divided into the following headings, as part of the process of conducting the current investigation.

- **Studies related to risk assessment of dental caries.**
- **Studies related to prevalence of dental caries.**
- **Studies related to management of dental caries.**

STUDIES RELATED TO RISK ASSESSMENT OF DENTAL CARIES

In order to investigate the frequency & pattern of tooth caries development in kids aged 6 years who were observed for a period of five years, as well as to determine baseline risk variables linked with five years of caries experience in Malaysian children, a cohort study was carried out. Of the 1830 schoolchildren in the sample, 950 (51.9%) were boys and 880 (48.1%) were girls. There were notable variations in every DMFT component between the baseline and final exams.

The study was done to determine the carries risk by the Caries management and risk assessment for children with dentition. The sample was made with 89 kids between the ages of 8 and 12 who were of both genders. Here, 38.2% of people had a high caries risk, 32.6% had a moderate risk, and 29.6% had a low risk. Spot lesions on smooth surfaces were the most common sign of the disease.[19]

A cross-sectional study on dental caries risk assessment in school-age children (ages 6 to 10) was carried out. The ultimate objective of this study was to use an American Dental Association evaluation method to determine the dental caries risk among schoolchildren in Chennai, age 6 to 10. 152 school-age children, aged 6 to 10, who had siblings enrolled in the same school, participated in the study. As a consequence, 98 men (64.5%) and 54 women (35.5%) were chosen to participate in the research. Of the 152 kids, 2.0% were classified as low-risk, 40.8% as moderate-risk, and 57.2% as high-risk. Out of the eighteen factors that were evaluated, only three were determined to be significant in predicting risk in the sample under study.[4]

In order to determine the caries risk among students attending government and private schools in the Tamil Nadu district of Tirupur, a cross-sectional study was carried out. This study involved 136 youngsters, 67 of whom were female and 69 of whom were male. Study participants from public and private schools were split into groups based on their likelihood of avoiding dental caries, from high-risk to low-risk. 52.1% of the 69 study participants in government schools were classified as low-risk, and 2.9% as high-risk. Out of the 67 study participants from private schools, 27.3% fell into the medium-risk category, 72.7% into the low-risk category, and none into the high-risk category. [16]

Dental caries is a result of human progress and is becoming more and more of a concern for society due to its great potential over the course of three months, a cross-sectional descriptive epidemiological study was carried out to assess the risk of caries in school-age children in Sullia Taluk, Dakshina Kannada. Dietary composition, frequency of food, and mutans count were found to be statistically significant determinants in determining caries risk, based on the study of the relative contributions of each cariogram parameter to the caries experience. ($p<0.05$).[17]

A study was done to evaluate and ascertain the dental health of 6-year-old schoolchildren in the Udaipur area of India in connection to socio-behavioural variables. In order to determine how socio behavioural traits affected the dental carries experience of 6-year-old urban and rural schoolchildren in the Udaipur area, the study set out to analyse the dental carries experience in deciduous dentition. Out of the 875 schoolchildren in the sample, 461 and 412 were from urban and rural areas, respectively, and 463 of them were males and 412 were girls. Six-year-old children's mean carrying experience and carries prevalence were determined to be 1.69 and 58.9%, respectively. The prevalence varies by gender, with boys experiencing it at a higher rate [62.2%] than girls [55.1%].

STUDIES RELATED TO PREVALENCE OF DENTAL CARIES

On Alem Ketema, North Showa, Ethiopia, a quantitative study conducted on an institution seeks to investigate the frequent occurrence of tooth caries and related matters in elementary school students. From 9thFebruary to 8thMarch, 2020, 422 elementary school students participated in the study. Data collection for the pretested structured questionnaire and oral examinations utilized the WHO (DMFT) criteria index, followed by binary logistic analysis. 46.9% of people had dental caries. The Decayed, Missing, and Filled Teeth (DMFT) index has a mean value of 1.28. The Cronbach Alpha test was used to determine the analysis's reliability, and the result was 0.75. In this case, the average age of the children was 10.9, and 58.3% of the respondents were men. They conclude that inadequate hygiene, sex, a history of tooth pain, and a lack of parental insistence.[10]

In the Ethiopian city of Bihar Dar, a cross-sectional study on dental caries and related factors was carried out among elementary school students. The intent of the investigation is to ascertain the frequent occurrence of dental cavities in elementary school students, as well as its contributing factors. The youngsters were chosen by a rigorous random sample procedure in a cross-sectional study done at Bihar City's school base. Structured questions served as the assessment tool for knowledge. 67.6% of the 147 children—82 (55.4%) of whom were girls—cleaned their teeth using the conventional way. There were 32 children (21.8%) who had dental caries. The predominant dental caries around 24 (75%). [3]

In preschoolers in metropolitan Bangalore, India, a cross-sectional study was executed to determine the frequency of early childhood caries and related risk generating factors. The study's objective is to look into the occurrence of early childhood caries and associated risk generating factors among preschoolers in Bangalore, India's urban areas. One thousand five hundred children, ages eight to forty-eight months, were chosen at random from different parts of Bangalore's urban area. The mean deft was 0.854, and the frequency of ECC in preschoolers was 27.5%. With aging, ECC rose dramatically. [15]

The rate and incidence of dental caries in primary school going students was investigated using a cross-sectional study design. The objective was meant to address prevalence and treatment needs of dental caries among Indian schoolchildren aged 6-11. 13,200 youngsters were chosen from 10 Talukas in the Belagavi District of Karnataka, India, to make up the study sample. The mean DMFT was 2.67, the mean DMFT was 0.16, and the overall caries prevalence was 78.9%. Children aged 8 to 9 had a high incidence of dental caries in their primary dentition, while children aged 10 to 11 had a high incidence of dental caries in their permanent dentition.[16]

A cross-sectional study was conducted on the occurrence and contributing factors of dental cavities in a group of Satao, Portugal, schoolchildren. The objectives of study included determines the frequent occurrence of tooth caries, DMFT, and DMFT index in children of school age, as well as examining the relationships between oral health practices and socio-demographic characteristics. A cross-sectional study evaluated 605 students from Satao, Portugal's 27 public schools, ages 6 to 12. 35.7% of the sample's children left urban regions, compared to 64.3% in rural ones. Of the students, 49.6% were male and 50.4% were female. Mouthwash usage and a lack of knowledge about oral health were important predictors of tooth caries.[17]

In North Africa and the Middle East, A study was implemented to point out the facts contributing to dental caries taking place in children. Reviewing the socioeconomic, behavioral, and cultural factors that influence dental caries that takes place in kids living in the Middle East & North Africa (MEWA) mainland was the goal. As a result, 77 articles total—74 cross-sectional, 2 longitudinal, & 1 case control study—out of around 600 original articles were included in this review. A total of 94, 491 people from 14 MENA countries participated in the studies. The prevalence of caries varied from 17.2% to 88.8%, early childhood caries from 3% to 57%, and decaying missing filled teeth (DMFT) from 0.6 to 8.5 in each age group.

In Eastern Saudi Arabia, a cross-sectional study was conducted to assess the prevalence of dental caries in both primary and permanent teeth, and to explore its correlation with the brushing practices of students. The study's location was in Dammam, Saudi Arabia. The individuals were examined verbally from February to May of 2014.There were 711 participants in total for this cross-sectional survey. 397 kids between the ages of 6 and 9 had their permanent tooth caries checked out. As a result, over 71% of primary and permanent teeth had dental caries overall (n=711).

The frequency of caries was almost 78% (n=397) among children aged 6 to 9 and 10% among those aged 10 to 12. The prevention of caries was positively impacted by daily tooth brushing, and this impact.

STUDIES RELATED TO MANAGEMET OF DENTAL CARIES

The Faculty of Dentistry at the University of Hong Kong conducted a study focusing on non-restorative approaches to managing dental caries. This study aligned with evidence-based caries-control strategies advocated in the 2016 World Dental Federation (FDI) policy statement. According to a 2015 survey, approximately 2.4 billion individuals worldwide—comprising 34% of adults and 8% of children—have untreated caries. Research indicates that the average lifespan of a resin composite restoration is merely six years, and the prevalence of white spot lesions among orthodontic patients ranges from 38% to 78%.

In addressing caries etiology and risk factors, emphasis should be placed on non-restorative care. This involves controlling dental plaque, reducing cavity risk, safeguarding dental hard tissue, and ensuring long-term maintenance. Modern caries prevention strategies advocate minimal intervention dentistry, prioritizing non-restorative management throughout all stages of caries development. .[22]

Abdulhadi Warreth conducted a study on dental caries and how treatment has changed over time. The most modern practical methods include caries prevention, early detection, and a diagnosis based on risk factor and indicator assessment. The attempts to accomplish a number of objectives, including the remineralisation of the non-capitalized lesion, early diagnosis of carious lesions, individual risk assessment for

patients, and the adoption of a preventative philosophy. Detection of tooth decay is achieved through a clinical evaluation, often employing a visual & tactile method [18–20], and radiographs are often used to support this diagnosis.[23]

A randomized controlled trial was used to evaluate how to manage dental caries using the oral biofilm care technique. This study set out to evaluate the efficacy of two crucial dental caries prevention strategies: the toothpick method (TPM) and general brushing and polishing with a rubber (POL). The information gathered consisted of repeated measurements. The three groups of general brushing, POL, and TPM were compared for the influencing factors of dental caries by time using the ANOVA test. As a result, the TPM proved to be a successful oral biofilm eradication technique. According to the dental plane and taking into account the oral health of the patient, a more specialized and efficient oral care technique should be used to avoid dental caries.[16]

One investigation highlighted the effectiveness of the International Caries Detection and Assessment System (ICDAS) in tracking and diagnosing cavities. This method categorizes suspicious lesions into six groups, with a higher score indicating a more advanced stage of the condition. Dental caries represents a significant risk to healthcare since it is the most prevalent disease worldwide. Practically all adults suffer from dental cavities. Although the condition is largely preventable, it is more prevalent in lower socioeconomic groups and has not significantly diminished in the last thirty years. Maintenance of teeth, limiting the development of new carious lesions, detecting caries activity, identifying the first lesions, and prolonging the preservation of tooth tissue are all important aspects of dental caries care.[15]

A cohort study was carried out in the Chinese mainland, where despite decades of efforts by researchers and dentists to battle dental caries, the incidence and prevalence of the condition remained quite high. As a result, enhancing disease control is crucial for the general public as well as dental caries life cycle management.

CHAPTER-3

METHODOLOGY

CHAPTER – III

METHODOLOGY

This chapter includes the type of research methodology that was applied, the population under study, the sampling strategy, the sample selection process, the exclusion and inclusion criteria, the development of the tool, the data collection procedure, the data analysis plan, and the data gathering process.

Research approach:

The research approach denotes the methods used to carry out the study in order to meet its goals. The project will employ a quantitative research approach**.**

Research design:

A research design is an investigation overall idea for obtaining answer for the research questions. In the study true experimental design will be used.

Variables;

Variables are attributes, traits, or qualities of individuals, objects, or circumstances that fluctuate or alter.

Dependent Variables:

The dependent variable in this study is dental caries.

Independent Variables:

The independent variable in this study is risk assessment.

Population

In this study conducted, the population consists of primary school going children ageing between 6years to 10years.

Setting

In the present study, the setting is in rural primary school, Kolar Taluk.

METHOD OF DATA COLLECTION

The data is collected on permission from head of institution /head of department / administer of the primary school and parents.

Pre – preparatory phase

An official written consent will be obtained from the parents of school going children studying in rural primary school by carrying out simple random sampling technique method.

Data collection phase

The risk of dental caries will be assessed individually by using standard tool of AAPD and the intervention will be administered based on the level of exposure to risk of developing dental caries. 20-30min will be spent with each of the children.

SAMPLING PROCEDURE

Sampling entails the procedure of selecting a subset of people or components from a larger population for inclusion in a study. Here, Simple Random Sampling Technique will be employed.

SAMPLE

A sample is a subset or percentage of the population chosen to serve as a representative sample for the population of interest. For the study, a sample of primary school children aging between 6 - 10years.

SAMPLE SIZE

Here, 60 samples will be randomly selected in which 30 samples will be considered as study group and 30 samples will be considered as control group

CRITERIA FOR SELECTION OF SAMPLE

Inclusive Criteria

1. Primary School children between 6 to 10 years.
2. Willing to take part in the research study.
3. Accessible at the data collection phase.
4. Able to understand English and Kannada.

Exclusive Criteria

1. Children those possessing dental problems
2. Children with any health issues

DATA COLLECTION TOOL

The data collection followed in the study involved the following technique.

SECTION – 1

It consists of Name, Age, Gender, Standard, Fathers name, Fathers occupation, Mothers name, Mothers occupation.

SECTION- 2

It consists of risk assessment tool of AAPD.

SECTION – 3

Managing by using dietary intervention and teaching [AAPD Tool] oral hygiene to the primary school children.

METHODS OF DATA COLLECTION

Data is to be gathered through the steps that follow.

Step 1

From institutional ethical committee, ethical clearance will be acquired**.**

Step 2

The permission has to be formally acquired from the concerned authorities within the institution

Step 3

Informed consent will be secured from teachers, parents and individuals involved prior to data collection by explaining the purpose of duration of the study.

Step 4

60 Sample will be randomly selected in which 30 samples will be considered as study group and 30 samples will be considered as control group.

Step 5

All the primary school children between 6 – 10years will be assessment for risk of developing dental caries using AADP Tool.

Step 6

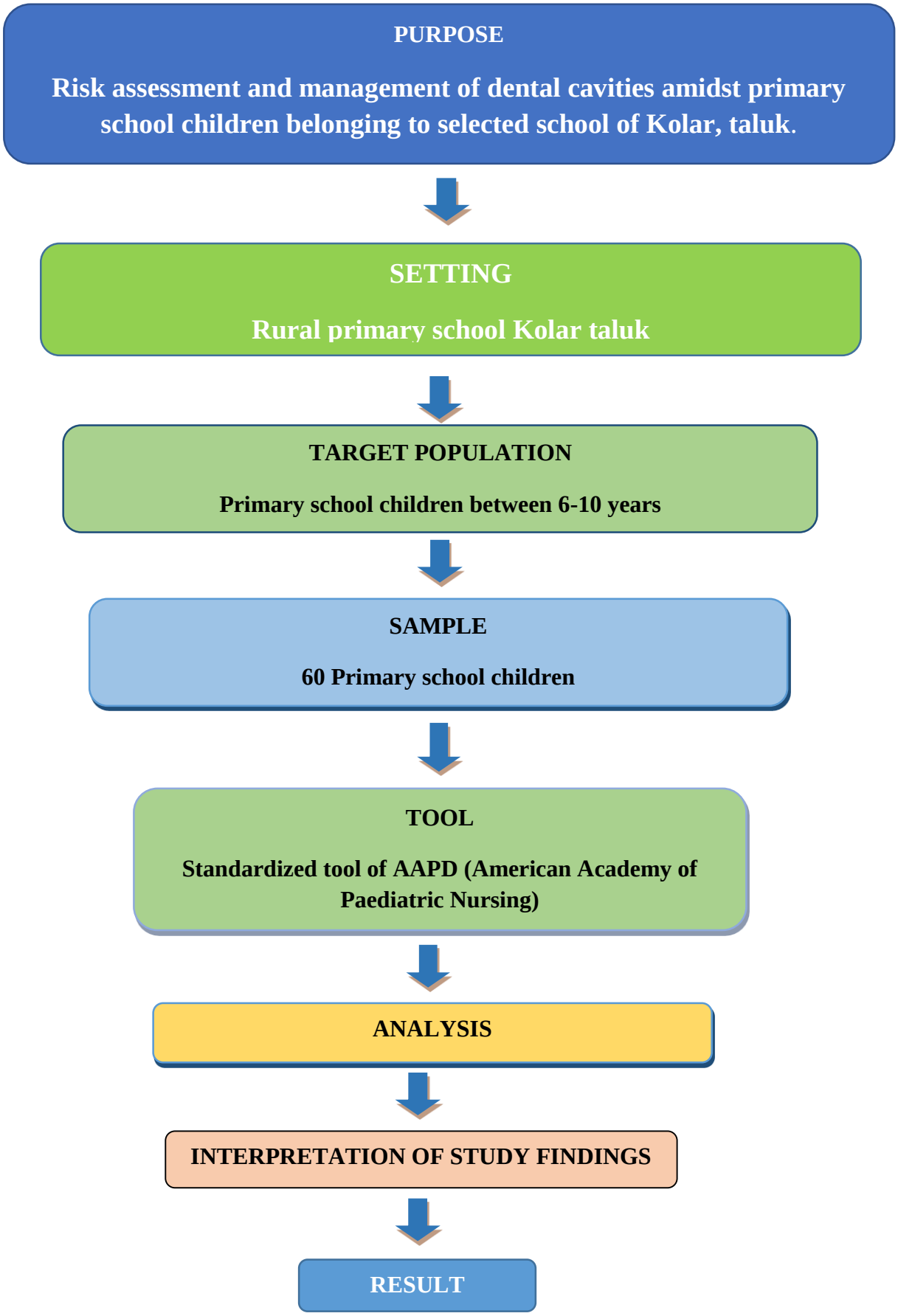
Based on the level of risk, participants will be separated into high risk, moderate risk, and low risk.

Step 7

Depending on the level of risk dietary intervention of oral hygiene /care will be administered as per AAPD Tool.

Step 8

After 3 months, again the risk will be assessed in both control and study group.


PURPOSE
Risk assessment and management of dental cavities amidst primary school children belonging to selected school of Kolar, taluk.
SETTING
Rural primary school Kolar taluk
TARGET POPULATION
Primary school children between 6-10 years
SAMPLE
60 Primary school children
TOOL
Standardized tool of AAPD (American Academy of Paediatric Nursing)
ANALYSIS
INTERPRETATION OF STUDY FINDINGS
RESULT

CHAPTER 4

RESULTS

CHAPTER IV

RESULTS

In this chapter, the collection, scrutiny and elucidation of data of our study on dental caries risk assessment and management among primary school students in certain Kolar, Taluk schools are covered. The study's goals and underlying presumptions guided the collection of the data.

Under the following sections, the data analysis is structured and displayed

Section I: Demographic profile

Section II:

It consists of Risk Assessment Tool of AAPD.

Section III:

Management by using dietary intervention and teaching (AAPD Tool) oral hygiene to the primary children.

SECTION -I

SOCIO DEMOGRAPHIC PROFILE

DISTRIBUTION OF SAMPLE ACCORDING TO AGE.

AGE IN YEAR	EXPERIMENTAL GROUP	PERCENTAGE	CONTROL GROUP	PERCENTAGE
6-7 YEARS	9	30%	7	23%
8-9 YEARS	8	26%	13	43%
10 AND ABOVE	13	44%	10	34%
GRAND TOTAL	30	100%	30	100%

Table 1: depicts the bulk of youngsters in experimental group are 44% older than 10 years old, 30% older than 6 years old, and 26% older than 8 years old. In the control group, 43% of the children are in the 8–9 age group, 34% are in the 10 year and older age group, and 23% are in the 6-7 age group.

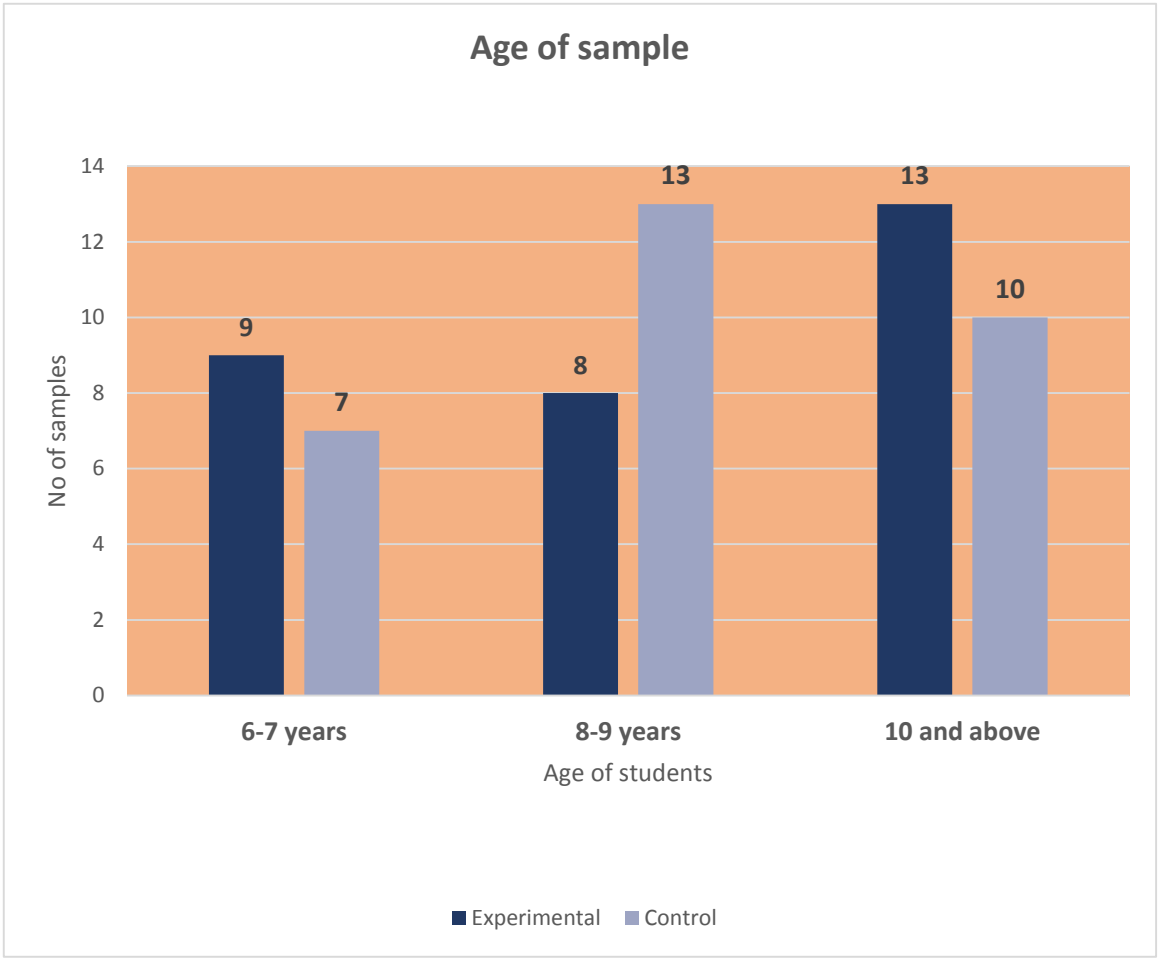


Figure 2: Sample distribution based on age.

DISTRIBUTION OF SAMPLE ACCORDING TO GENDER.

Gender	Experimental group	Percentage	Control group	Percentage
MALE	17	56%	14	46%
FEMALE	13	44%	16	54%
TOTAL	30	100%	30	100%

Table 2:it depicts in experimental group, majority 56% of students are male and 44% are female. In the control group, the majority 55% of students are female and 46% are male.

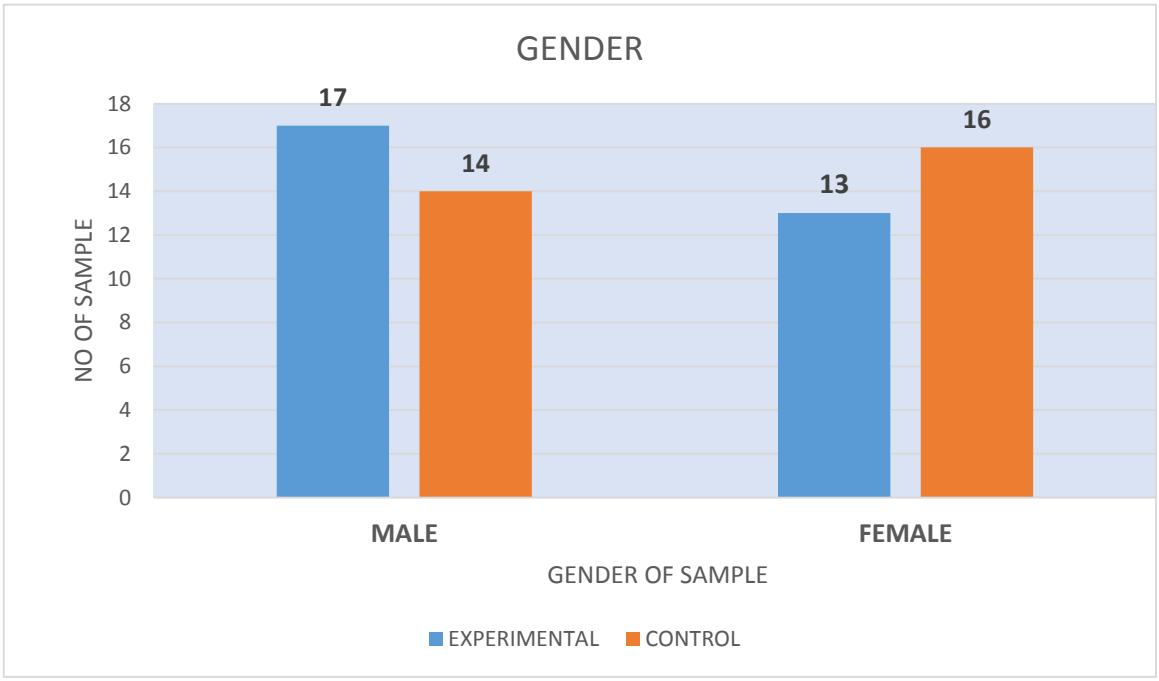


Figure 3: Sample distribution based on gender.

ISTRIBUTION OF SAMPLE ACCORDING TO STANDARDS.

STANDARD	EXPERIMENTAL GROUP	PERCENTAGE	CONTROL GROUP	PERCENTAGE
FIRST STANDARD	4	14%	9	30%
SECOND STANDARD	5	16%	6	20%
THIRD STANDARD	8	26%	9	30%
FOURTH STANDARD	4	14%	6	20%
FIFTH STANDARD	9	30%	30	100%
TOTAL	30	100%	9	30%

TABLE 3: Despites that, in the experimental group majority 30% of students are in 5^{th} standard,26% of students are in 8^{th} standard, 16% of students are in 5^{th} standard, 14% are in 4^{th} and 1^{st} standard. In the control group, the majority 30% are in second and fourth standard,20% are in third and fifth standard

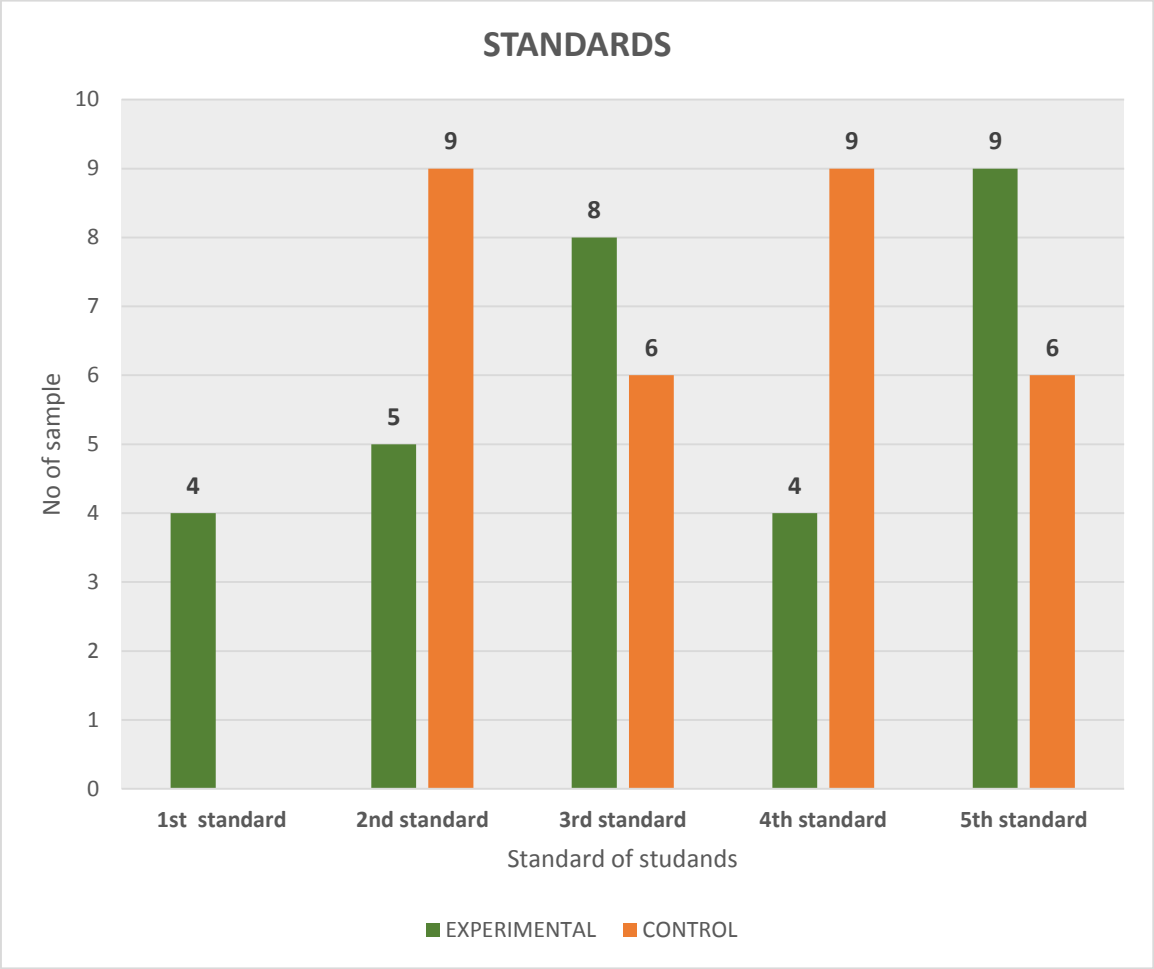


Figure 4: Sample distribution based on standard of students.

DISTRIBUTION OF SAMPLE ACCORDING TO OCCUPATION OF FATHER.

OCCUPATIONAL STATUS	EXPERIMENTAL GROUP	PERCENTAGE	CONTROL GROUP	PERCENTAGE
DAILY WAGER	6	20%	7	23%
AGRICULTURE	17	57%	8	27%
PRIVATE EMPLOYEE	5	17%	8	27%
GOVERNMENT EMPLOYEE	2	6%	7	23%
TOTAL	30	100%	30	100%

Table 4:it depicts in the experimental group 57% of children have their parents engaged in agriculture, 20% belong to daily wagers, 17% belong to private sector, and 6% belong to government sector. In the control group, 27 % of children have their parents belong to agriculture and private sector, and 23% belong to daily wagers and government sector.

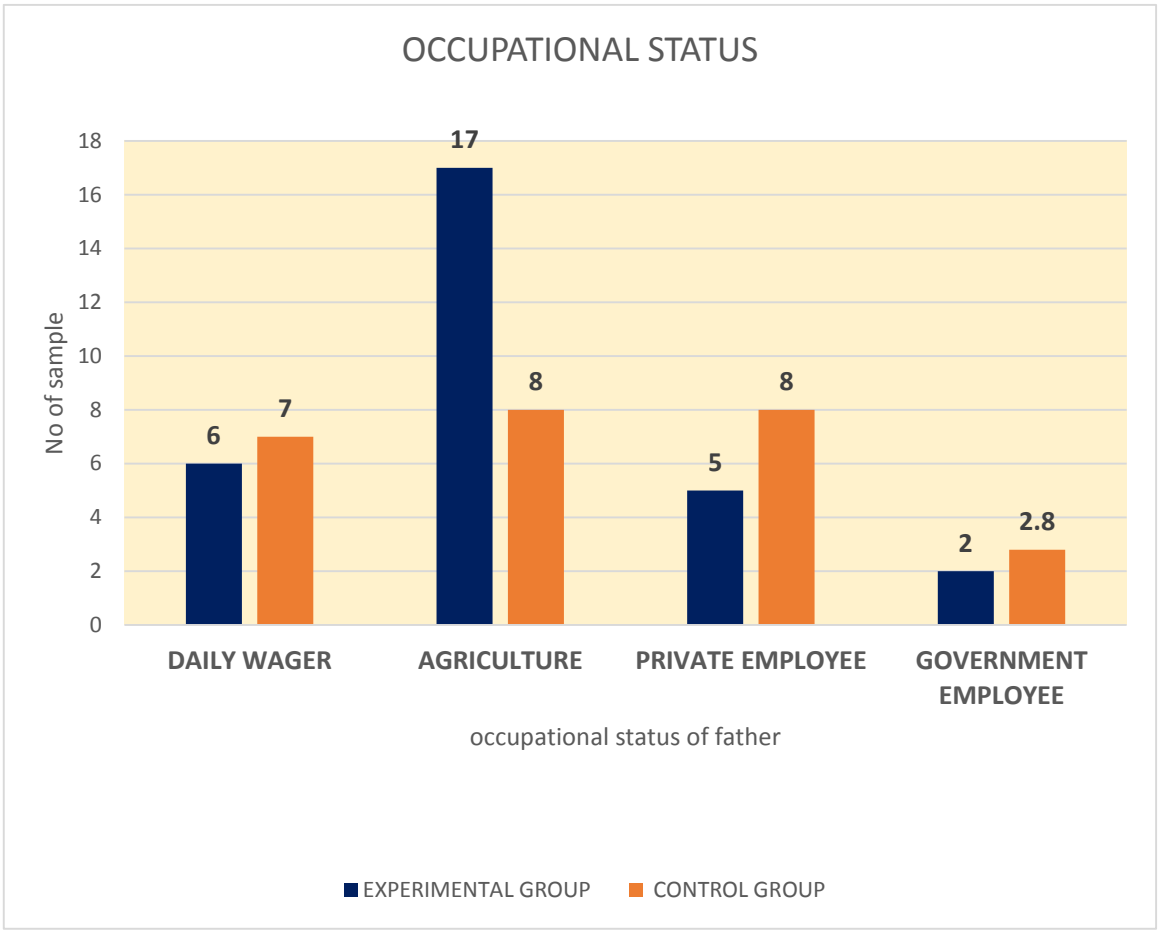


Figure 5: Sample distribution based on occupation of father.

DISTRIBUTION OF SAMPLE ACCORDING TO OCCUPATION OF MOTHER.

OCCUPATIONAL STATUS	EXPERIMENTAL GROUP	PERCENTAGE	CONTROL GROUP	PERCENTAGE
DAILY WAGER	6	20%	0	0%
AGRICULTURE	2	7%	3	20%
PRIVATE EMPLOYEE	4	13%	10	33%
HOMEMAKER	18	60%	17	57%
TOTAL	30	100%	30	100%

Table 5:it depicts, in the experimental group 60% of children have their mothers engaged in a homemaker, 20% belong to daily wagers, 13% belong to private sector, and 7% belong to government sector. In the control group, 57 % of children have their homemaker belong to agriculture, 33% belongs to private sector, 20% belong to agriculture sector.

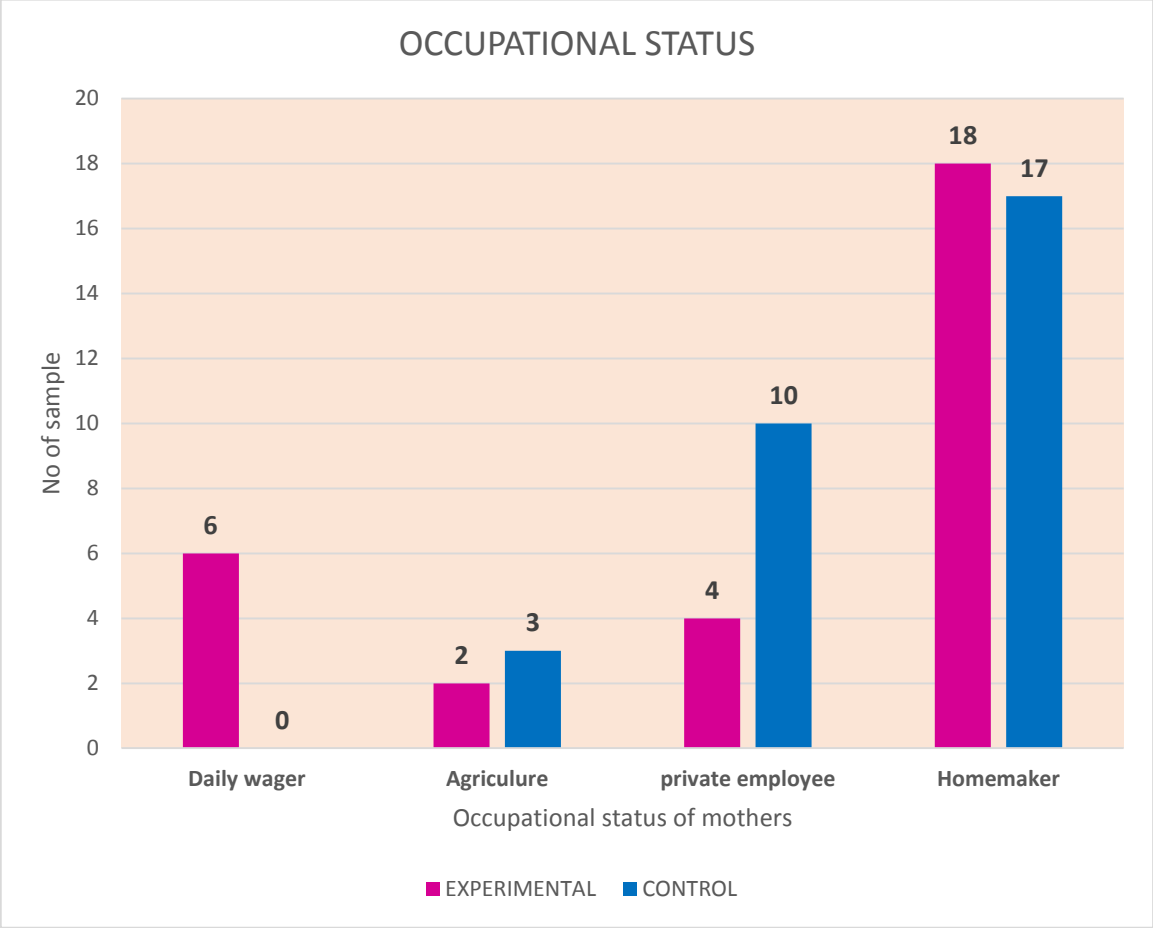


Figure 6: Sample distribution-based occupation of mother.

DISTRIBUTION OF SAMPLE ACCORDING TO TIMES OF BRUSHING.

TIMES OF BRUSHING	EXPERIMENTAL GROUP	PERCENTAGE	CONTROL GROUP	PERCENTAGE
ONE TIME	0	0%	30	100%
TWO TIME	30	100%	0	0
GRAND TOTAL	30	100%	30	100%

TABLE 6: Depicts in experimental group 100% of students brush twice a day. In control group 100% of students brush once a day.

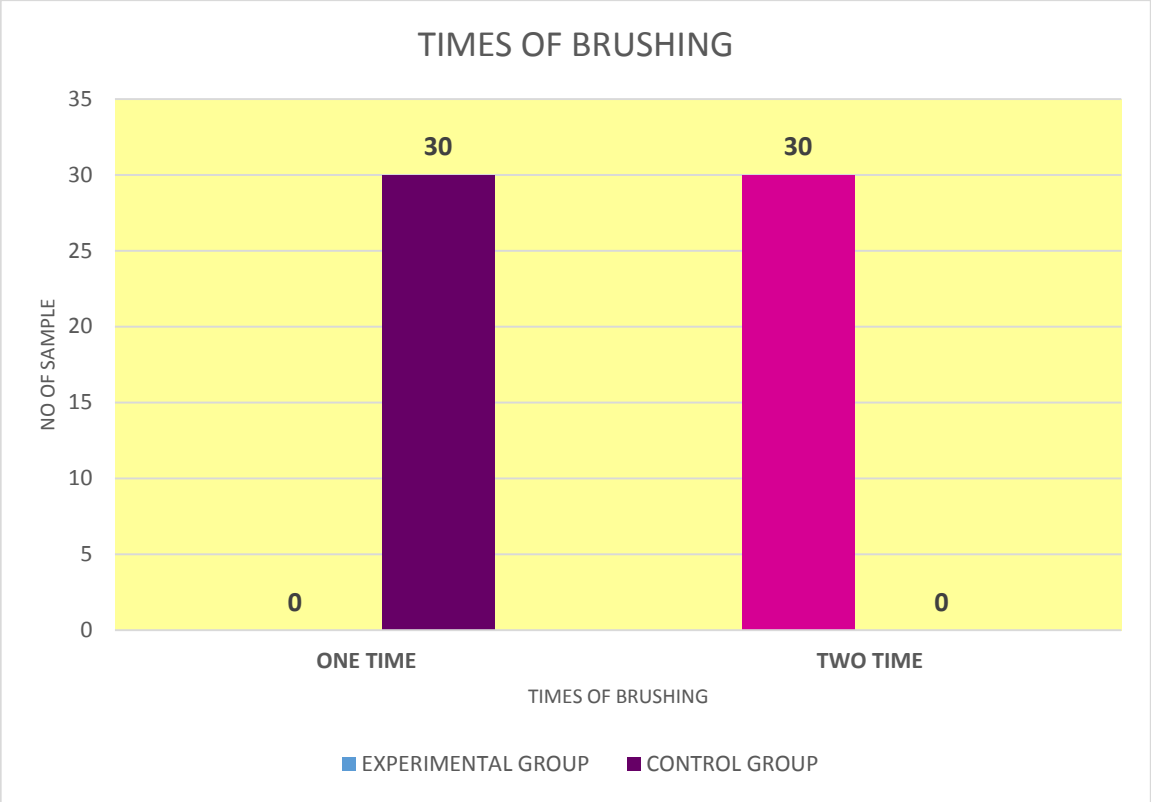


Figure 7: Sample distribution based on number of times of brushing.

DISTRIBUTION OF SAMPLE ACCORDING TO INTAKE OF CHOCOLATE.

DO YOU EAT CHOCOLATE	EXPERIMENTAL GROUP	PERCENTAGE	CONTROL GROUP	PERCENTAGE
YES	30	100%	30	100%
NO	0	0	0	0
GRAND TOTAL	30	100%	30	100%

TABLE 7: it depicts in experimental group 100% of student's intake chocolates. In the control group 100% of student's intake chocolates.

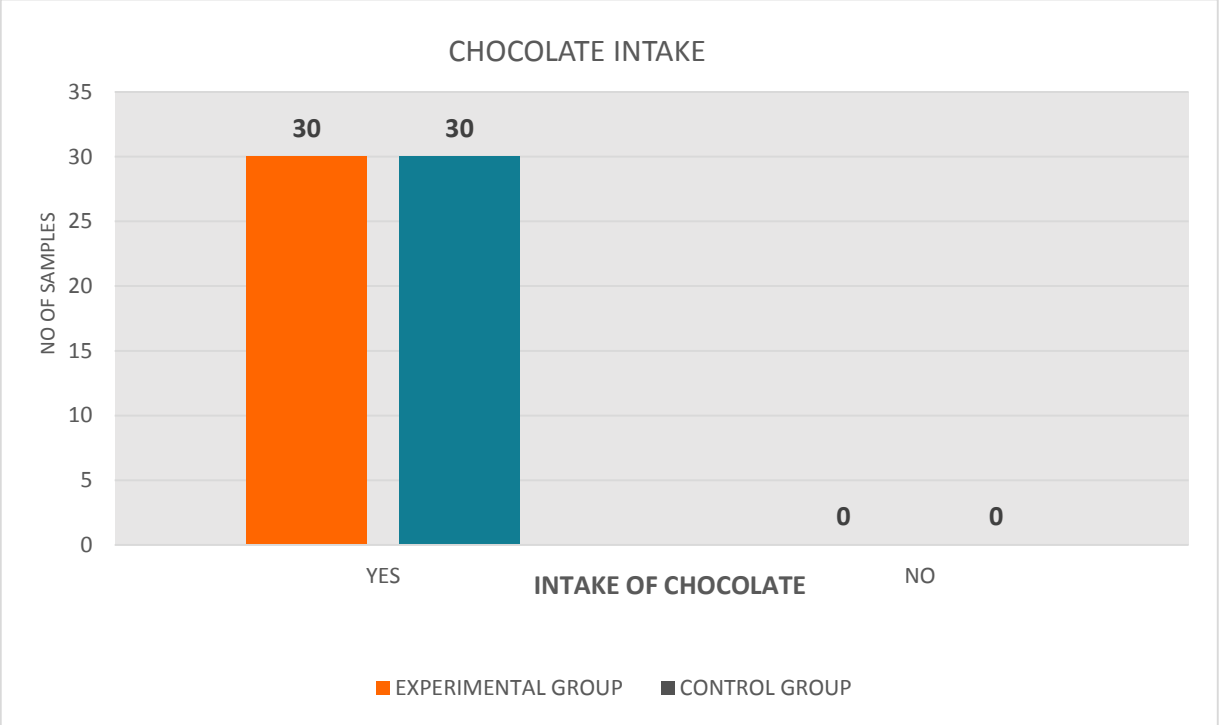


Figure 8: Sample distribution based on intake of chocolate.

DISTRIBUTION OF SAMPLE ACCORDING TO HOW OFTEN ATE CHOCOLATE.

HOW OFTEN ATE CHOCOLATE	EXPERIMENTAL GROUP.	PERCENTAGE	CONTROL GROUP.	PERCENTAGE
EVERYDAY	0	0%	21	70%
SOMETIMES	30	100%	6	20%
3 DAYS ONCE	0	0%	2	7%
WEEKLY ONCE	0	0%	0	0%
2 TIMES A DAY	0	0%	1	3%
GRAND TOTAL	30	100%	30	100%

TABLE 8: It depicts in experimental group 100%% of students ate chocolate sometimes. In control group, 70% of students ate every day and 20% of students ate sometimes, 7% 0f students ate 3 days once and 3% of students ate 2 times a day**.**

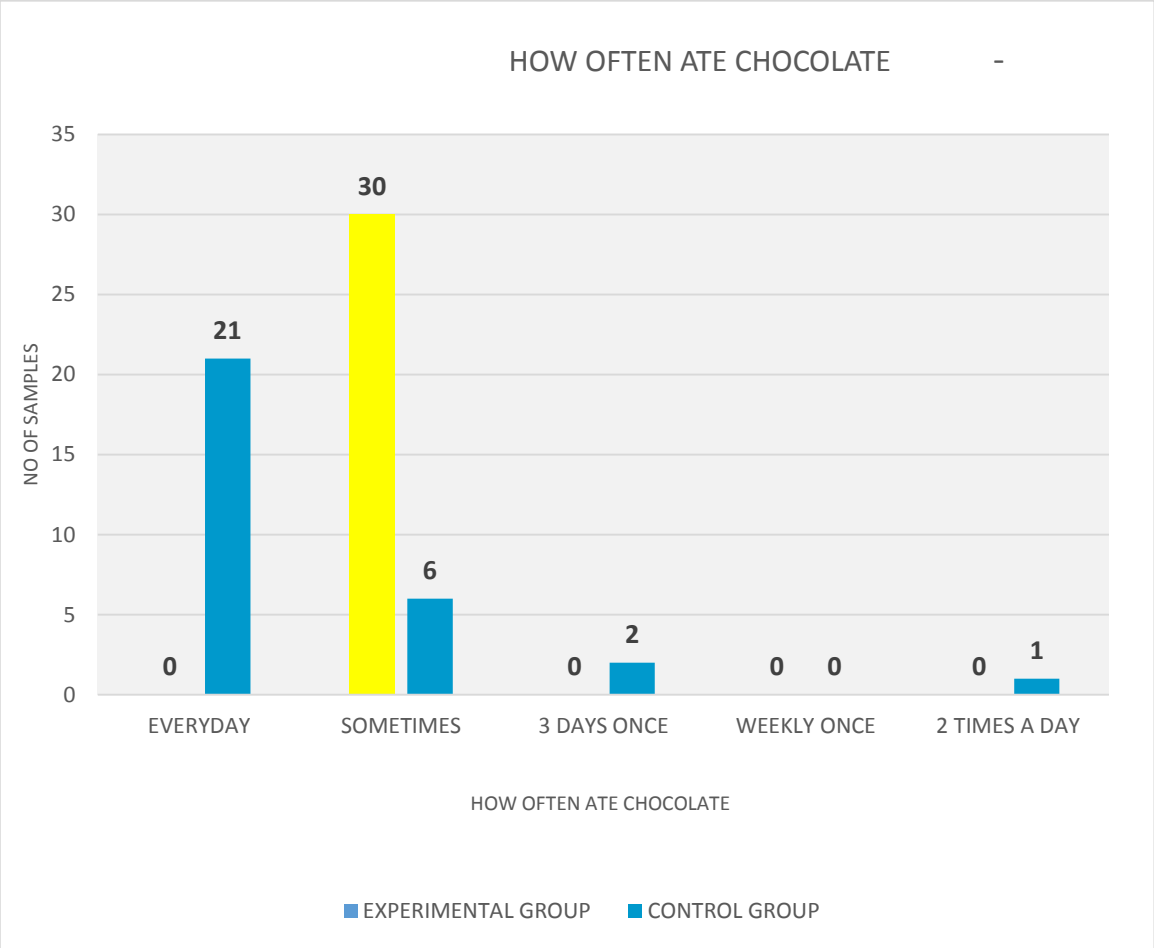


FIGURE 9: Sample distribution based on how often ate chocolate.

DISTRIBUTION OF SAMPLE ACCORDING TO WASHING MOUTH AFTER HAVING FOODS/SWEETS.

WASHING MOUTH AFTER HAVING FOOD /SWEETS	EXPERIMENTAL GROUP	PERCENTAGE	CONTROL GROUP	PERCENTAGE
YES	30	100%	3	10%
NO	0	0	27	90%
GRAND TOTAL	30	100%	30	100%

Table 9: it depicts in the experimental group 100% of children wash mouth after meals. In control group, 90% of children not wash mouth after having meals.

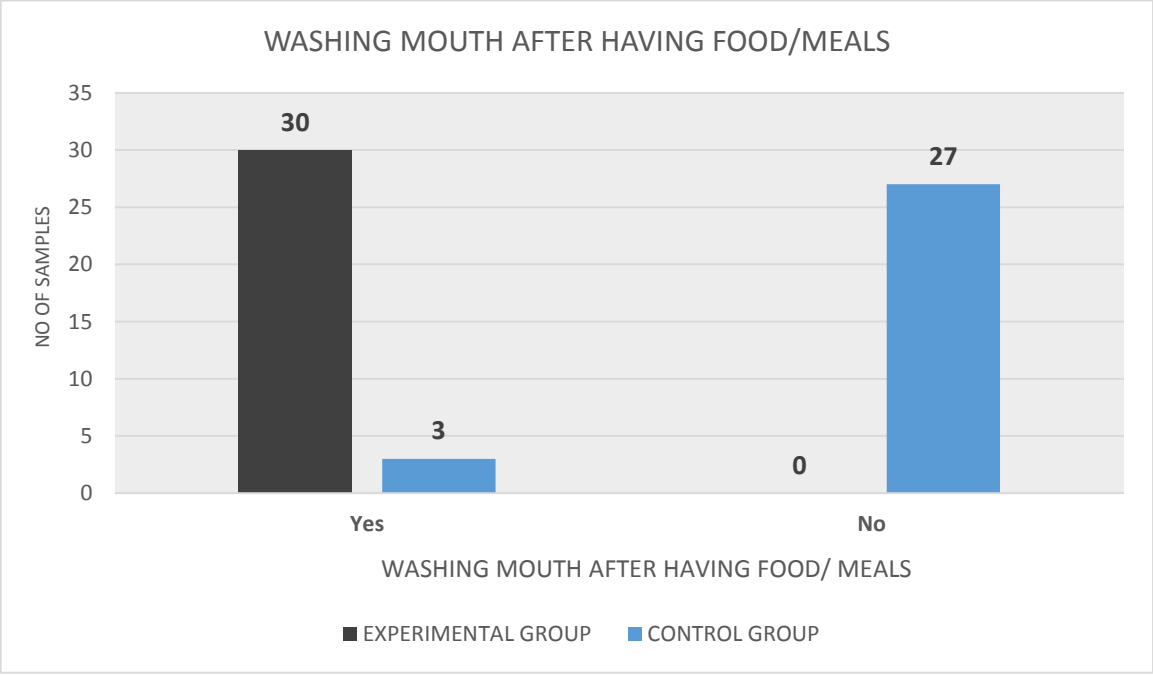


Figure 10: Sample distribution based on washing mouth after having meals.

DISTRIBUTION OF SAMPLE ACCORDING TO PAIN WHILE CHEWING FOOD.

PAIN WHILE CHEWING FOOD	EXPERIMENTAL GROUP	PERCENTAGE	CONTROL GROUP	PERCENTAGE
YES	0	0%	**7**	**24%**
NO	30	100%	**23**	**76%**
TOTAL	30	100%	**30**	**100%**

Table10: Depicts that in the experimental group 100% of children not have pain while chewing food. In the control group, 76% of children have no pain while chewing food, and 24% of children don't have pain while chewing food

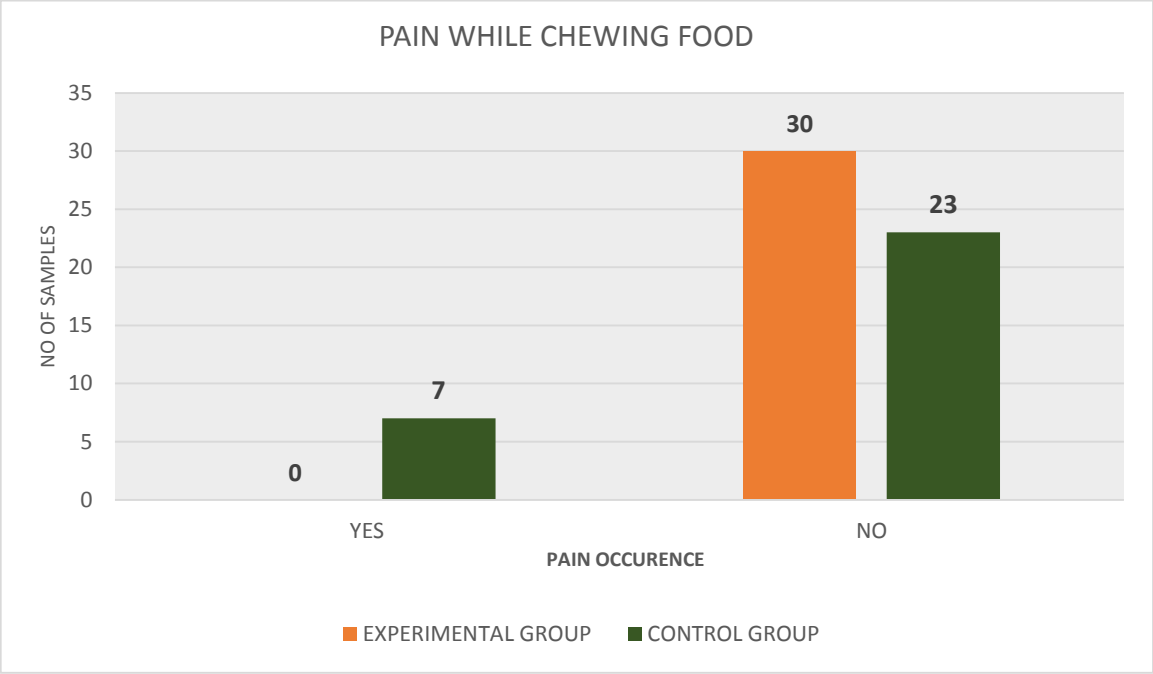


Figure 11: Sample distribution based on pain while chewing food.

DISTRIBUTION OF SAMPLE ACCORDING TO BLEEDING GUMS PRESENT IN STUDENTS.

BLEEDING GUMS	EXPERIMENTAL GROUP	PERCENTAGE	CONTROL GROUP	PERCENTAGE
YES	0	0%	7	24%
NO	30	100%	23	76%
GRAND TOTAL	30	100%	30	100%

TABLE 11: It depicts in experimental group 100% of children have no bleeding gums. In control group, 76% of children have no bleeding and 24% of children have bleeding gums.

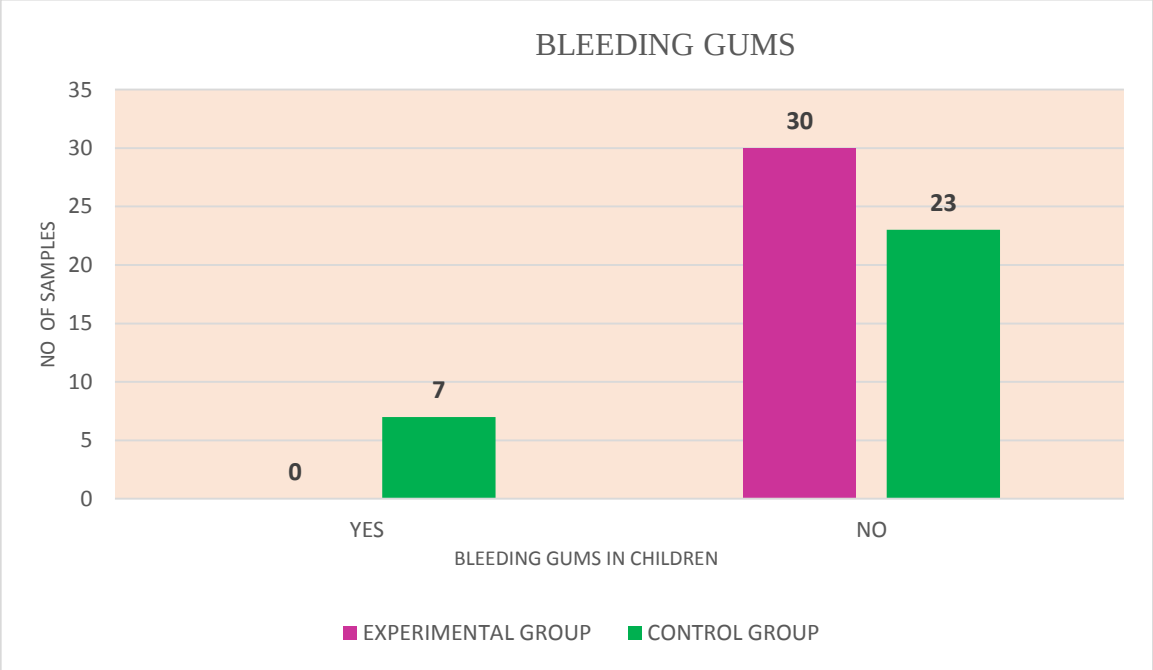


Figure12: Sample distribution based on bleeding gums present in children.

DISTRIBUTION OF SAMPLE ACCORDING TO VISITING ON DENTIST.

HEALTH CARE NEED	EXPERIMENTAL GROUP	PERCENTAGE	CONTROL GROUP	PERCENTAGE
YES	0	0%	0	0%
No	30	100%	30	100%
GRAND TOTAL	30	100%	30	100%

Table 12: Depicts that in the experimental group, 100% of children not visited any dentist. In the control group 100% of children not visited any dentist.

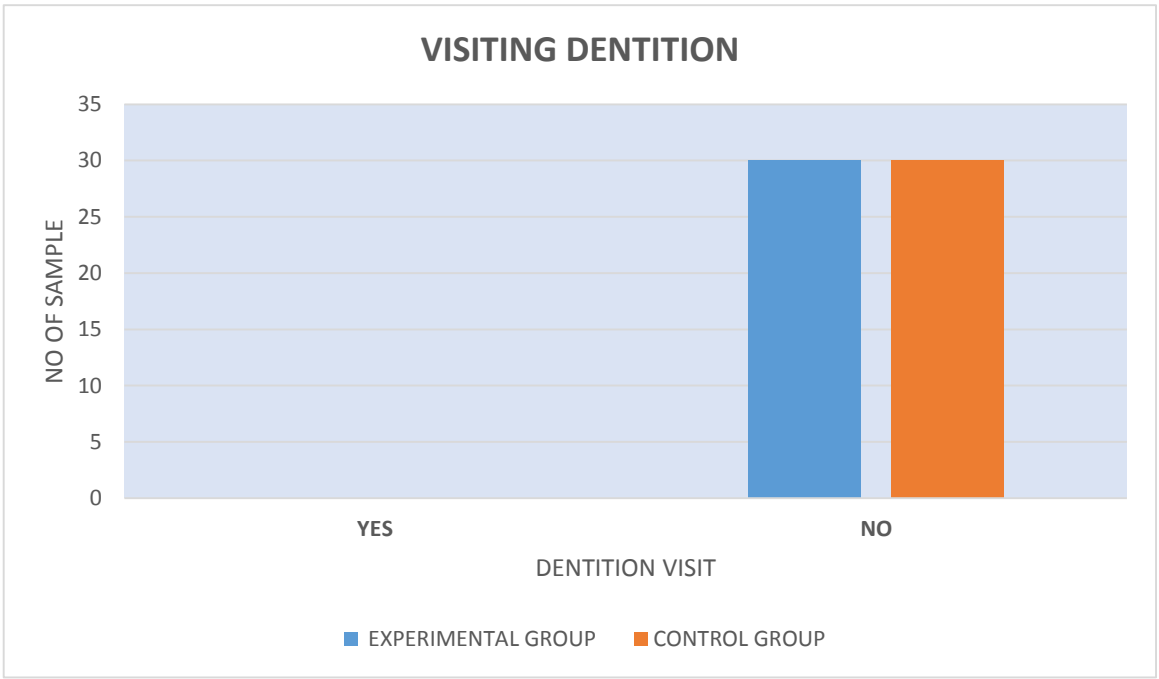


Figure 13: Sample distribution based on visiting dentist.

SAMPLE DISTRIBUTION ACCORDING TO HEALTH CARE NEEDS.

HEALTH CARE NEED	EXPERIMENTAL GROUP	PERCENTAGE	CONTROL GROUP	PERCENTAGE
Yes	0	0%	2	7%
No	30	100%	28	93%
Total	30	100%	30	100%

Table13: It depicts in the experimental group, 100% of children do not possess needs on health care. In the control group, 93% of children not need health care needs and 7% of children possess needs on health care.

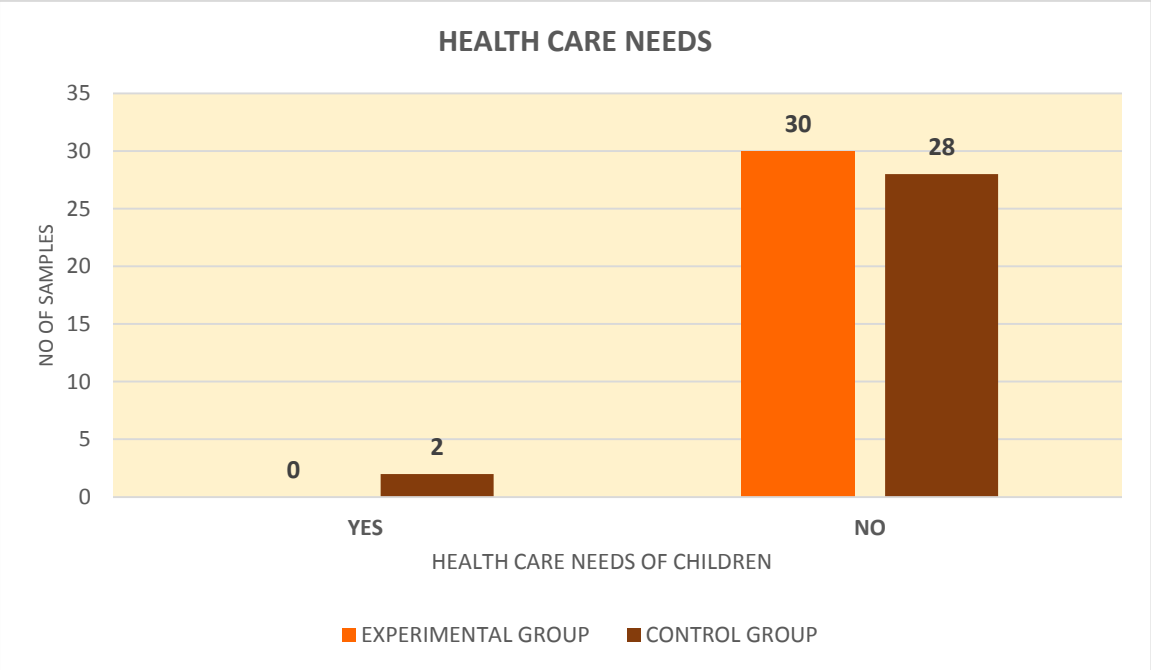


Figure14: Sample distribution based on health care needs.

DISTRIBUTION OF SAMPLE ACCORDING TO UNDERGONE OF ANY DENTAL FILLING

DENTAL FILLING	EXPERIMENTAL GROUP	PERCENTAGE	CONTROL GROUP	PERCENTAGE
Yes	0	0%	0	0%
No	30	100%	30	100%
Total	30	100%	30	100%

TABLE 14: it depicts 100% of students not undergone any dental filling.

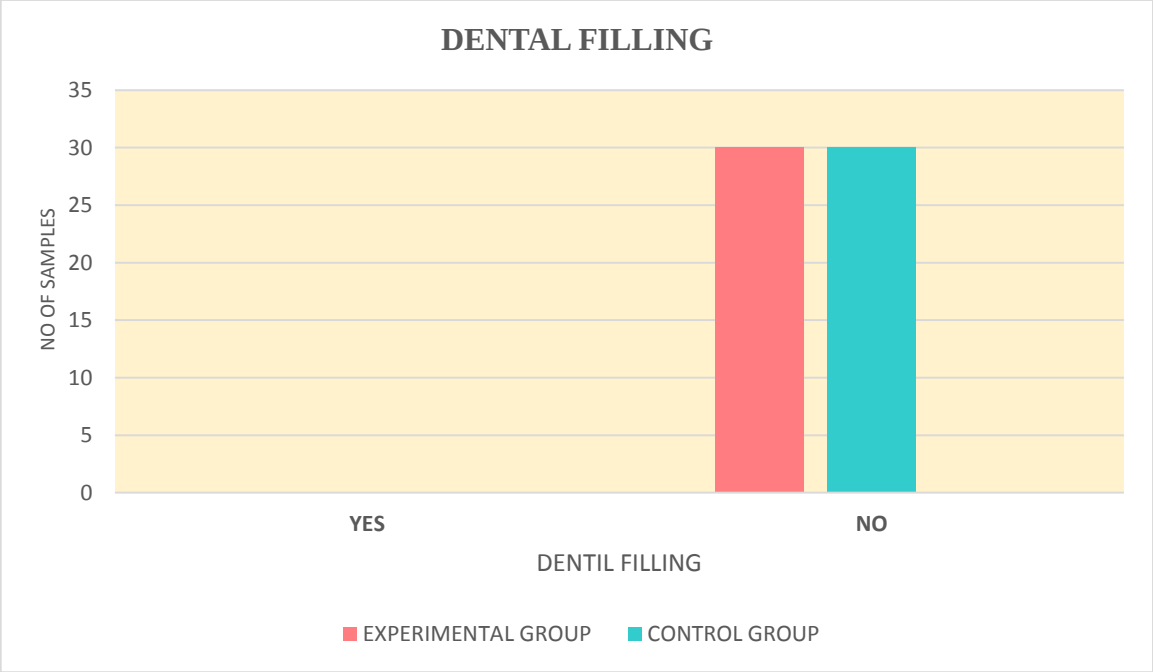


Figure 15: Sample distribution based on dental filling.

SECTION 2 & 3

RISK CATEGORY	EXPERIMENTAL GROUP		CONTROL GROUP	
	PRE-TEST	POST TEST	PRE-TEST	POST TEST
HIGH RISK	**3**	**0**	**17**	**17**
MODERATE RISK	**18**	**3**	**10**	**10**
LOW RISK	**9**	**27**	**3**	**3**

Pre-test assessment

In experimental group high risk was 3, moderate risk was 18, low risk was 9.

In control group high risk was 17, moderate risk was 10, low risk was 3.

After the pre-test assessment the risk was categorized and provide intervention based on risk.

Low risk: twice daily brushing was instructed and given tooth brush and paste.

Moderate risk: twice daily brushing with fluorinated tooth paste was instructed and given tooth brush and paste.

High risk: twice daily brushing with fluorinated tooth pastes and educate to take fluoride supplement was instructed and given tooth brush and paste.

After intervention post test was conducted.

Posttest assessment

In experimental group high risk was 0, moderate risk was 3, low risk was 27.

In control group high risk was 17, moderate risk was 10, low risk was 3.

Hence with the above finding it shows that AAPD tool in assessing risk and management of dental caries is effective in reducing the risk among children.

CHAPTER: V

DISCUSSION

CHAPTER V

DISCUSSION

The goal of the current study was on evaluating the management and risk assessment of tooth caries in elementary school students attending particular Kolar Taluk schools. The results are addressed under the section on demographic traits and goals.

SECTION: - 1A variety of sociodemographic information is included, including parent's education and occupation, age, gender, religion, and level of education.

SECTION: - 2 It consists of risk assessment tool of AAPD.

SECTION: - 3 Management by using dietary intervention and teaching

[AAPD Tool] oral hygiene to the primary school children

SECTION 1: - It consists of Socio demographic data of children.

Age

, 44% are female. In control group, the majority 55% of students are female, 46% are male in control group.

Standards

Depicts that, in experimental group majority 30% of shows that the bulk of the youngsters in the experimental group are 44% older than 10 years old, 30% older than 6 or 7 years old, and 26% older than 8 or 9 years old.

In control group, 43% of children are in the 8–9 age group, 34% are in the 10 year and older age group, and 23% are in the 6-7 age group.

Gender

shows that, among the pupils in the experimental group, the majority (56%) are male. Students are in 5th standard,26% of students are in 8th standard, 16% of students are in 5th standard, 14% are in 4th and 1st standard. In control group, the majority 30% are in second and fourth standard,20% are in third and fifth standard.

Occupational status

Occupational status of father.

Depicts that, in experimental group 57% of children have their parents engaged in agriculture, 20% belong to daily wagers, 17% belong to private sector, and 6% belong to government sector. In control group, 27 % of children have their parents belong to agriculture and private

In control group, 27 % of children have their parents belong to agriculture and private sector, and 23% belong to daily wagers and government sector.

Occupational status of mother.

Depicts that in experimental group 57% of children have their parents engaged in agriculture, 20% belong to daily wagers, 17% belong to private sector, and 6% belong to government sector. In control group, 27 % of children have their parents belong to agriculture and private sector, and 23% belong to daily wagers and government sector.

Sample according to times of brushing

Depicts that in experimental group 100% of students brush twice a day. In control group 100% of students brush once a day.

Sample according to intake of chocolate.

Depicts that in experimental group 100% of student's intake chocolates. In control group 100% of student's intake chocolate.

Sample according to how often ate chocolate.

Depicts that in experimental group 100%% of students ate chocolate sometimes. In control group, 70% of students ate every day and 20% of students ate sometimes, 7% 0f students ate 3 days once and 3% of students ate 2 times a day**.**

Sample according to washing mouth after having food/sweets.

Depicts that in experimental group 100% of children wash mouth after meals. In control group, 90% of children not wash mouth after having meals.

Sample according to pain while chewing food.

Depicts that in experimental group 100% of children not have pain while chewing food. In control group, 76% of children have no pain while chewing food, and 24% of children don't have pain while chewing food

Sample according to bleeding gums present in students.

Depicts that in experimental group 100% of children have no bleeding gums. In control group, 76% of children have no bleeding and 24% of children have bleeding gums.

Sample according to visiting on dentist.

Depicts that in experimental group, 100% of children not visited any dentist. In control group 100% of children not visited any dentist.

Sample distribution according to health care needs.

Depicts that in experimental group, 100% of children not need health care needs. In control group, 93% of children do not possess needs on health care and 7% of children have needs on health care.

Sample according to undergone of any dental filling.

Depicts that 100% of students not undergone any dental filling.

.

CHAPTER VI
CONCLUSION

CHAPTER VI

CONCLUSION

This chapter makes an effort to summarize the study's key findings, conclusions, ramifications, restrictions, proposals, and suggestions.

This research endeavors to evaluate dental health risks & address them for elementary school students, ages 6 to 10, in a few Kolar Taluk schools. This is experimental research in which a convenient sampling procedure was used to obtain 60 samples. Individual information was gathered through the use of an AAPD tool questionnaire. Each sample in the experimental and control groups received 10–15 minutes (30 each). The data were scrutinized and elucidated using statistical methods.

OBJECTIVES OF THE STUDY;

- To assess the risk of dental carries by using standardized tool American Academy of Pediatric Nursing [AAPD]
- To determine effects of dental carries management using AAPD tool for school children [period of three months]

MAJOR FINDINGS OF THE STUDY

- Majority 44% of the children belongs to 10years and above in the experimental group &In the control group, majority 43% of the children aged in between 8-9 years,
- Majority 56% of students are male and 44% are female in experimental group

- Majority 55% of students are female and 46% are male in the control group.
- Majority 30% of students are in 5^{th} standard and 6% of students are in 8^{th} standard in experimental group
- Majority 30% are in second and fourth standard and20% are in third and fifth standard in control group.
- Majority 57% of children have their parents engaged in agriculture and 20% belong to daily wagers in experimental group.
- Majority 27 % of children have their parents belong to agriculture and private sector, and 23% belong to daily wagers and government sector in control group.
- Majority 100% of students brush twice a day in the experimental group and 100% of students brush once a day in control group
- Majority 100% of student's intake chocolates in both control & experimental group
- Majority 100%% of students ate chocolate sometimes in the experimental group &70% of students ate every day in control group.
- Majority 100% of the children wash mouth after meals in experimental group & 90% of children not wash mouth after having meals in control group.
- Majority 100% of the children in experimental group
  & 76% of children have no pain while chewing food in control group.
- Majority 100% of children in the experimental group & 76% of children have no bleeding in the control group
- Majority100% of the children not visited any dentist in both experimental & control group.

- Majority100% of the children in experimental group & 93% of children in control group not need health care needs.
- Majority100% of students not undergone any dental filling.

IMPLICATION OF THE STUDY

The study's conclusions have an impact on nursing practice, education, administration, and research, among other areas.

NURSING PRACTICE

- An educational program that employs efficient teaching techniques will assist parents, schoolchildren, and nurses in enhancing their nursing practice by identifying the early indicators of dental caries.
- Nursing professions can motive the significant others and family regarding risk assessment and management of dental caries.

NURSING EDUCATION

- Conference, Workshop, in the service education, Seminar can be carried out for nurses to impart, develop and update their knowledge on risk assessment and management of dental caries.
- Nursing curriculum has to focus on enabling the nursing students to develop knowledge proper assessment, analysis and management of dental caries.

- Highlight the key components and guidelines of the AAPD tool for risk assessment and management of dental caries.
- Discuss any challenges or barriers that nurses may encounter in implementing the AAPD tool and providing effective interventions to school going children.
- Developing diverse teaching practices that align with community and societal norms should be a priority for nurses.

NURSING RESEARCH

- This study will be reference material for future study.
- This study encourages nurses to undertake studies on dental health challenges, offering support for policymaking endeavours
- This study is the preliminary setup for exploring the use of dental caries risk assessment and management by using AAPD tool in school children.
- This study causes remarkable improvement in dental health in Kolar taluk

LIMITATION OF STUDY

- This study is restricted to a specific group of students in particular schools of Kolar Taluk
- This sample was limited to 60.
- Employing a structured knowledge questionnaire for data gathering constrained the quantity of information that could be gathered from the respondents.
- The interventions were primarily monitored by the close relatives of children and was communicated to the nurse researcher.

RECOMMENDATIONS

In light of the study's findings, the following suggestions were put forth:

- A comparable study on a larger sample size could be replicated on generalizing the findings.
- An analogous study with other tools can be made to compare the results.
- The study could be expanded by including more demographic variables.
- A set of educational programs on the same subject can be taught to schoolchildren.
- A study akin to this one can be carried out with a self-instrumental module and a lesson plan.

SUMMARY

The nurse researcher in this study addressed a variety of nursing implications for nursing research, nursing practice, and nursing education. It makes clear the study's limitations. Future research on dental caries and its risk assessment and management will benefit from the researcher's expertise, which helped to provide ideas and recommendations during the study. A brief conclusion was formulated and discussed by the researcher based on the findings.

CHAPTER VII

SUMMARY

CHAPTER VII

SUMMARY

A captivating smile can brighten not only the individual's appearance but also the mood of those around them According to child psychology, children who smile well are better able to develop their social skills and sense of self. On the basis of research by AAPD standardized tool, the second most progressive disease among 6-10 years children is dental caries after worm infestation. The conduction of proper awareness program me and health education along with risk assessment, management by using Standardized management combined with a standardized tool will help to evaluate the risk and lower the likelihood of dental caries.

The main objectives of the study on RISK ASSESSMENT AND MANAGEMENT OF DENTAL CARIES AMONG PRIMARY SCHOOL CHILDREN I SELECTED SCHOOL OF KOLAR, TALUK. The data was gathered from a sample of 60 primary school students residing in rural areas with the help of standardized tool of AAPD to assess the risk and management of dental carries.

The study aims at accomplish the following objectives

- To assess the risk of dental caries by using standardized tool AAPD.
- To determinant the effect of dental caries management using AAPD tool for school children.

METHODOLOGY

The study centres on Experimental approach; True experimental design was used for the collection of data. The total sample is 60. Demographic data like Name, Age, Gender, Standard, Name of the father, Paternal employment, Name of the mother, Mother's occupation.

The instrument used in the present study will be AAPD standardized tool to recognise the caries risk assessment and management protocols of dental caries.

SECTION I: Sociodemographic data of children.

SECTION II: Risk assessment tool.

SECTION III: Management of dental caries.

SECTION I:

Sociodemographic data of children

It consists of: Name, Age, Gender, Standard, Name of the father, Paternal employment, Name of the mother, Mother's occupation.

SECTION II

It consists of: risk assessment tool of AAPD. It contains three factors are biological, protective and clinical findings. Based on these factors tool was categorizing the risk of tooth caries into high-risk, moderate risk & low risk.

SECTION III

It consists of: Management by using dietary intervention and teaching oral hygiene to the primary school children. According to the rick category, two brushing sessions using fluoride-containing toothpaste and brushes were given.

Findings related to sociodemographic data of children

- Majority 44% of the children belongs to 10years and above in experimental group & in control group, majority 43% of children in between 8-9 years,
- Majority 56% of students are male and 44% are female in experimental group
- Majority 55% of students are female and 46% are male in the control group.
- Majority 30% of students are in 5^{th} standard & 6% of students are in 8^{th} standard in experimental group
- Majority 30% are in second and fourth standard and20% are in third and fifth standard in control group.
- Majority 57% of children have their parents engaged in agriculture and 20% belong to daily wagers in experimental group.
- Majority 27 % of children have their parents belong to agriculture and private sector, and 23% belong to daily wagers and government sector in control group.

Findings related to risk assessment and management of dental caries.

Pre-test assessment

In experimental group high risk was 3, moderate risk was 18, low risk was 9.

In control group high risk was 17, moderate risk was 10, low risk was 3.

After the pre-test assessment the risk was categorized and provide intervention based on risk.

Low risk: twice daily brushing was instructed and given tooth brush and paste.

Moderate risk: twice daily brushing with fluorinated tooth paste was instructed and given tooth brush and paste.

High risk: twice daily brushing with fluorinated tooth pastes and educate to take fluoride supplement was instructed and given tooth brush and paste.

After intervention post test was conducted.

Post test assessment

In experimental group high risk was 0, moderate risk was 3, low risk was 27.

In control group high risk was 17, moderate risk was 10, low risk was 3.

CHAPTER VIII

CHAPTER VIII

REFERENCE/ BIBLIOGRAPHY

1. WHO. World Health Organization. Health topics. Oral health Geneva: Switzerland; 2017. Downloaded from the URL https://www.who.int/health-topics/oral-health#tab=tab_1
2. Rebecca Slayton, Margherite Fontana, Douglar Young. Dental caries management in children and adults. National Academy of Medicine. American: non-government organization; 2015. Available from URL https://nam.edu/caries and dental-caries-management-in-children-and-adult/
3. Anguach Shitie, Rahel Addis, Abebe Tilahum and warsie Nagash. Prevalence of dental caries and its associated factors among primary school children in Ethiopia. Introduction. Alessandra Leite Cavalcanti. International journal of dentistry:etopia:2021. Available from the URL: https://doi.org/10.1155/2021/6637196
4. Manu Rathee, Amit Sapara. Dental caries.In: StatPearls. Treasure Island: StatPearls publishing;2023Jan. Available from the URL: https://www.ncbi.nlm.nih.gov/books/NBK551699/
5. American Academy of Paediatric Dentistry. Caries-risk assessment and management for infants, children and adolescent. The Reference Manual of Paediatric Dentistry. Chicago, III: American Dentistry of Paediatric Dentistry, 2022; 266-72. Downloaded from the URL:http://www.aapd.org
6. Cleaton – Johns p, Fatti p, bonecker M.Dental Caries trends in 5-to 6-yr-older and 11-to-13yr old children in 3 UNICEF designated regions—Sub Saharan Africa, Middle East and North Africa, Latin America and

Carribon:1970-2004.International dental journal vol.56.Available from the URL: https://doi.org/10.1111/j.1875-595x.2006.tb00104.x

7. Seyed-Ali Sadegh-Zadeh et.al. Dental Caries Risk Assessment in Children 5 Years Old and under via Machine Learning. Dentistry Journal;2022; volume 10; issue 9,pg.no164. Available from the URL: http://doi.org/10.3390/dj10090164
8. Anusha Raghavan. Dental Caries Risk Assessment Among 6-10 years Children – A pilot study. Tamil Nadu: Department of Public Health Dentistry;2017 http://doi.org/10.23959/sfdorj-1000023
9. Ingle,Navin Anand et.al.Prevalence of dental caries amond school children of Bharatpur city India. Journal of International Society of Preventive and Community Dentistry. Vol.4. Rajasthan: 2014.Available on the URL: https://doi.org/10.4103%2F2231-0762.13126
10. Abed R, Bernabe E, Sabbah W. Family Impacts of Severe Dental Caries among Children in the United Kingdom. Int J Environ Res Public Health. 2019 Dec 22;17(1):109. United Kingdom. 2020.Available from the URL https://10.3390/ijerph17010109.
11. Dumitrescu, Ramona et al. Dental Caries, Oral Health Behavior, and Living Conditions in 6-8-Year-Old Romanian School Children. Vol. 9,6 903:Switzerland:16 Jun. 2022, Available from the URL:https://doi:10.3390/children9060903
12. Mohd Masood, Norashikn Yusof.et.al. Household expenditure of dental care in low- and middle-income countries. Introduction. Peter M Milgrom.United States. University of Washington; 2015. Available from the URL: http://www.who.int/healthinfo/survey/en/

13. Licia Aguilar Freitas.et.al caries risk assessment by CAMBRA in children. Alessandro Leite Cavalcanti. Paediatric Dentistry. Brazil; 2016. Available from the URL: https://www.redalyc.org/pdf/637/63749588021.pdf
14. Tadakamadla SK, Tadakamadla J, Tibdewal H, Duraiswamy P, Kulkarni S. Dental caries in relation to socio-behavioral factors of 6-year-old school children of Udaipur district, India. Dent Res J (Isfahan). Rajasthan: Dental research journal. 2012.Available from the URL: https://pubmed.ncbi.nlm.nih.gov/23559941/
15. Madhu Mitha M.et.al. Caries risk assessment among school going children of government and private school of Tirupur district. Tamil Nadu: Journal of Indian society of pedodontics and preventive dentistry; 2016; 34(3):244-8. Available from the URL: https://www.researchgate.net/publication/305626403_Caries_risk_assessment_among_12-13_year_old_school-going
16. Praveena S. et.al. Relationship of oral hygiene practices and dental caries among school children of Sullia Taluk. Karnataka:global journals;2013 Available from the URL: https://www.ijhsr.org/IJHSR_Vol.7_Issue.3_March2017/25.pdf
17. Anuguach Shitie, Rahel Addis et.al." Prevalence of Dental Caries and Its Associated Factors among Primary School Children in Ethiopia", International Journal of Dentistry, vol 2021, Article ID 6637196, 7 pages, 2021.Available from the URL:https://doi.org/10.1155/2021/6637196
18. Wondemagegn Mulu, et.al. Dental caries and associated factors among primary school children in Bihar. A sectional study.Bihar:2014.Available from the URL:

https://www.google.com/url?=https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4307198

19. Farooqi FA, Khabeer A, Moheet IA, Khan SQ, Farooq I, ArRejaie AS. Prevalence of dental caries in primary and permanent teeth and its relation with tooth brushing habits among schoolchildren in Eastern Saudi Arabia. Saudi. Med J. 2015.Available from the URL: https://doi.10.15537/smj.2015.6.10888.
20. Nelio Veiga, Carlos Pereira et.al. Prevalence and determinants of dental caries in a sample of school children of Satavo, Portugual.Prevalence and determinants of Dental caries.Odete Amaral;Portugal :ScienceDirect 2014: available from URL. https://doi.org/10.1016/j.rpemd.2014.10.004
21. Elamin A, Garemo M, Mulder A et.al.Determinants of dental caries in children in the Middle East and North Afrrica region:a systematic review based on literature published from 2000-2019.BMC Oral Health .2021 May 4;21(1):237. Available from the URL: https://doi.org/10.1186/s12903-021-01482-7
22. Kola Srikant Reddy, Sivakalyan Reddy et.al.Prevalence of Dental caries among 6-12 years school children of Mahububnagar District, Telangana state, india:A cross sectional study:Indian J Dent Sci. Available from the URL: http://www.ijds.in/text.asp?2017/9/1/1/201641
23. Prashanth Prakash, Priya Subramanian, BH Durgesh and Sapna Kande. Prevalence of early childhood caries and associated risk factors in preschool children. European Journal of Dentistry, Bangalore: Dental investigation society;2003.Available from the URL:

https://www.ncbi.n/m.nih.gov/pmc/articles/PMC3327493/&usg=AOvVaw3eN8F9avb7-Wul7YgEPCSM&hl=en_IN

24. Anand Hiremath.et.al Prevalence of Dental Caries among primary school children of India. A cross sectional study. Journal of clinical and Diagnostic Research:Belgavi:JCDR Research and publications private limited,2016 Available from the URL: https://www,n/m.n/h.gov/pmc/articles/pm5121803/
25. Ollie Yiru Yu.et.al. Non-restorative management of dental caries. Dental Caries across the adulthood lifespan.Faculty of dentistry.HongKong:2021. Available from the URL: https://www.mdpi.com/2304-6767/9/10/121
26. Lei Chung, Lu Zhang et.al. International Journal of oral science (2022). Expert consensus on dental caries management: west China;2022.Available from the URL: http://doi.org/10.1038/s41368-022-00167-3
27. Abdulhadi Wareth. Dental Caries and its management Murilo Baena Lopes. International journal of dentistry.UAE:2023 Available from the URL: https://www.hindawi.com/journals/ijd/2023/9365845.
28. Yu-Rin Kim, Seoul-Hee Nam.Caries management by the oral biofilm care method: A randomized controlled trial. Introduction. Current Pediatric Reasearch.Korea:Intenational journal of Pediatrics: 2022.Available from URL: https://doi.org.10.35841/0971-9032.26.4.1298-1304
29. ICDAS Coordinating Committee (2009) International Caries Detection and Assessment System (ICDAS II) - Manual criteria. Budapest:2009. Hungary. Available from the URL: https://www.iccms-web.com

CHAPTER IX

ANNEXURE

ANNEXURE - I

ETHICAL CLEARENCE CERTIFICATE

Sri Devaraj Urs College of Nursing, TAMAKA, Kolar 563 103.

(Affiliated to RGUHS, Bangalore and Recognized by KNC, Bangalore & INC, New Delhi)
ISO 9001: 2015 Certified & NAAC Accredited

Phone: 9480880802 E mail: [illegible] Website: [illegible]

28-07-23

Review/ Meeting Minutes No of IEC 02

The meeting of the IEC for the year 2022-2023 was held at SDUCON Council hall on 28/07/2023 at 10:30am onwards under the chairmanship of Dr. Prashanti N, Chairperson, and Institutional Ethics Committee. Dr. Lavanya Subhashini, Member Secretary welcomed committee members, following members attended the meeting

Members Present

Sl. No.	Names	Position in the committee	Signature
1	Dr. Prasanthi Natala	Chairperson	[signature]
2	Dr. Prabhakar	Member	—
3	Dr. Dayanand	Member	—
4	Dr. Asha . B	Member	[signature]
5	Mr. Ganesh	Member	[signature]
6	Achary Chinmayananda Avadutha	Member	[signature]
7	Dr. Lavanya Subhashini	Member Secretary	[signature]

[signature] 28/7/23
Member Secretary

[signature]
Chairperson

3	IEC/ 121/2023	Dr G. Vijayalakshmi Principal Co- investigator: Mrs Rashmi A Assistant professor	Effectiveness of Peer Learning versus Traditional Learning on Clinical Performance among first year BSc Nursing students at selected colleges, Kolar.	Accepted	Refer Minutes
4	IEC/122/2023	Dr. Lavanaya subhashini Vice Principal SDUCON Mrs. Sumalatha Associate Professor	A Comparative Study to Assess The Breast Milk Volume Among the mother's of Preterm Babies with Manual Expression and Breast Pump Expression at R L Jalappa Hospital and Research Center, Kolar"	Accepted	Refer Minutes
5	IEC/123 /2023	Prof Jairakini Aruna HOD Dept. of MHN Mrs. Ramya Assistant professor	Effectiveness of Life Skill Interventions in improving the quality of life among Alcohol Dependence patients at a selected hospital, Kolar.	Accepted	Refer Minutes
6	IEC/ 124/2023	Dr. Malathi K V HOD. Dept. of CHN Mrs Komala Devi R	Effectiveness of honey with papaya seeds in Managing worm infestation among primary School children's at selected schools of Kolar Taluk.	Accepted	Refer Minutes
7	IEC/ 125 /2023	Mrs. Sumana Yesu Priya Assistant professor Dept. of CHN	A study on risk assessment and management of dental carries among school children in selected schools of Kolar Taluk	Accepted	Refer Minutes

ANNEXURE - II

LETTER SEEKING PERMISION TO CONDUCT THE STUDY

FROM

4th year B.Sc. (N)

Research Group 6

SDUCON

Tamaka, Kolar

TO

The principal

SUDCON

Tamaka, Kolar

SUB: Requesting to grant permission for data collection (through research guide)

Respected madam,

This is for your kind information that we the 3rd year B.Sc. nursing community research students, would like to go for data collection in **Government School of kembodi**, **Kolar** & **Janatha High School** to conduct research project on "A study on risk assessment and management of Dental Caries among primary school children in selected schools of Kolar Taluk."

So please kindly permit us to conduct the research project and do the needful.

Thanking you.

Yours faithfully

Research group 7

Ms Blessy Shiju, Ms Christa Ann Joseph, Ms Christeena Thankachen, Mr Devaraj VR, Ms Lakshmi Parvathy, Ms Lathashree S, Ms Livyamol C Joseph, Ms Riya Anna Samuel, Ms Riya Raphael, MS Rosemariya Biju, Ms Vaishnavi KM and Ms Sireesha SR.

ANNEXURE- III

WRITTEN INFORMED CONSENT FORM

Study Title:

Code Number:

I confirm that I have read and understood the information given to me about this study and my role in it. I had opportunities to ask questions and my questions have been answered to my satisfaction.

Or

I confirm that all information about this study and my role in it has been read/explained to me by a member of the investigating team in a language that I understand. I had opportunities to ask questions and my questions have been answered to my satisfaction.

b) I understand that my participation in this study is voluntary and that I am free to withdraw from the study at any time, without giving any reason and legal rights being affected.

c) I understand that my identity will not be revealed in any document or publication.

d) I agree not to restrict the use/publication of any data or results that arise from this study

provided such use is only for scientific purposes.

e) I am aware that by agreeing to my participation in this investigation, I will have to give more time for training and assessments by the investigating team and that these assessments will not interfere with the benefits that I am entitled to or my daily routine.

f) I give my consent, voluntarily to take part in this study. I also agree for the investigator to record the observation/interview sessions whenever they are held.

Signature (or thumb impression) of study participants / Legally Acceptable Representative:

Name of the study participant: _____ Date: _/_/_/_____

Place:

Study participant signature: _____

Name of the investigator: _____ Date: _/_/_/_____

Place

Study Investigator's Signature: _____

ಲಿಖಿತ ಮಾಹಿತಿಯ ಒಪ್ಪಿಗೆ ನಮೂನೆ

ಅಧ್ಯಯನದ ಶೀರ್ಷಿಕೆ: : "ಕೋಲಾರ ತಾಲಕಿನಲ್ಲಿ ಆಯ್ಕೆ ಮಾಡಿದ ಶಾಲೆಗಳಲ್ಲಿ ಪ್ರಾಥಮಿಕ ಶಾಲಾ ಮಕ್ಕಳಲ್ಲಿ ಅಪಾಯದ ಮೌಲ್ಯಮಾಪನ ಮತ್ತು ಹಲ್ಲಿನ ಕ್ಷಯ ನಿರ್ವಹಣೆಯ ಕುರಿತು ಅಧ್ಯಯನ

ಕೋಡ್ ಸಂಖ್ಯೆ.

ಈ ಅಧ್ಯಯನದ ಬಗ್ಗೆ ಮತ್ತು ಅದರಲ್ಲಿ ನನ್ನ ಪಾತ್ರದ ಬಗ್ಗೆ ನನಗೆ ನೀಡಿದ ಮಾಹಿತಿಯನ್ನು ನಾನು ಓದಿದ್ದೇನೆ ಮತ್ತು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ ಎಂದು ನಾನು ಖಚಿತಪಡಿಸುತ್ತೇನೆ ನಾನು ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಅವಕಾಶಗಳನ್ನು ಹೊಂದಿದ್ದೆ ಮತ್ತು ನನ್ನ ಪ್ರಶ್ನೆಗಳಿಗೆ ನನ್ನ ತೃಪ್ತಿಗೆ ಉತ್ತರಿಸಲಾಗಿದೆ.

ಅಥವಾ

ಈ ಅಧ್ಯಯನದ ಕುರಿತಾದ ಎಲ್ಲಾ ಮಾಹಿತಿಯನ್ನು ಮತ್ತು ಅದರಲ್ಲಿ ನನ್ನ ಪಾತ್ರವನ್ನು ತನಿಖಾ ತಂಡದ ಸದಸ್ಯರೊಬ್ಬರು ನನಗೆ ಅರ್ಥವಾಗುವ ಭಾಷೆಯಲ್ಲಿ ಓದಿದ್ದಾರೆ/ವಿವರಿಸಿದ್ದಾರೆ ಎಂದು ನಾನು ದೃಢೀಕರಿಸುತ್ತೇನೆ ಎಂದು ಕೇಳಲು ನನಗೆ ಅವಕಾಶಗಳಿದ್ದವು.

ಬಿ) ಈ ಅಧ್ಯಯನದಲ್ಲಿ ನನ್ನ ಭಾಗವಹಿಸುವಿಕೆಯು ಸ್ವಯಂಪ್ರೇರಿತವಾಗಿದೆ ಮತ್ತು ಯಾವುದೇ ಕಾರಣವನ್ನು ನೀಡದೆ ಮತ್ತು ಕಾನೂನು ಹಕ್ಕುಗಳ ಮೇಲೆ ಪರಿಣಾಮ ಬೀರದೆ ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿಯಲು ನಾನು ಸ್ವತಂತ್ರನಾಗಿದ್ದೇನೆ ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ.

ಸಿ) ನನ್ನ ಗುರುತನ್ನು ಯಾವುದೇ ದಾಖಲೆ ಅಥವಾ ಪ್ರಕಟಣೆಯಲ್ಲಿ ಬಹಿರಂಗಪಡಿಸಲಾಗುವುದಿಲ್ಲ ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ.

ಡಿ) ಈ ಅಧ್ಯಯನದಿಂದ ಉಂಟಾಗುವ ಯಾವುದೇ ಡೇಟಾ ಅಥವಾ ಫಲಿತಾಂಶಗಳ ಬಳಕೆ/ಪ್ರಕಟಣೆಯನ್ನು ನಿರ್ಬಂಧಿಸದಿರಲು ನಾನು ಒಪ್ಪುತ್ತೇನೆ ಅಂತಹ ಬಳಕೆಯನ್ನು ವೈಜ್ಞಾನಿಕ ಉದ್ದೇಶಗಳಿಗಾಗಿ ಮಾತ್ರ ಒದಗಿಸಲಾಗಿದೆ.

ಇ) ಈ ತನಿಖೆಯಲ್ಲಿ ನನ್ನ ಭಾಗವಹಿಸುವಿಕೆಗೆ ಸಮ್ಮತಿಸುವ ಮೂಲಕ ತನಿಖಾ ತಂಡದಿಂದ ತರಬೇತಿ ಮತ್ತು ಮೌಲ್ಯಮಾಪನಕ್ಕಾಗಿ ನಾನು ಹೆಚ್ಚಿನ ಸಮಯವನ್ನು ನೀಡಬೇಕಾಗುತ್ತದೆ ಮತ್ತು ಈ ಮೌಲ್ಯಮಾಪನಗಳು ಮಧ್ಯಪ್ರವೇಶಿಸುವುದಿಲ್ಲ ಎಂದು ನನಗೆ ತಿಳಿದಿದೆ.

ಎಫ್) ನಾನು ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಸ್ವಯಂಪ್ರೇರಣೆಯಿಂದ ನನ್ನ ಒಪ್ಪಿಗೆಯನ್ನು ನೀಡುತ್ತೇನೆ. ತನಿಖಾಧಿಕಾರಿಗಳು ವೀಕ್ಷಣೆ/ಸಂದರ್ಶನದ ಅವಧಿಗಳು ನಡೆದಾಗಲೆಲ್ಲ ಅವುಗಳನ್ನು ದಾಖಲಿಸಲು ನಾನು ಒಪ್ಪುತ್ತೇನೆ, ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವವರ ಸಹಿ (ಅಥವಾ ಹೆಬ್ಬೆರಳಿನ ಗುರುತು) / ಕಾನೂನುಬದ್ಧವಾಗಿ ಸ್ವೀಕಾರಾರ್ಹ ಪ್ರತಿನಿಧಿ;

ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವವರ ಹೆಸರು:_____

ದಿನಾಂಕ: --/--/--

ಸ್ಥಳ:

ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸುವವರ ಸಹಿ:_____

ತನಿಖಾಧಿಕಾರಿಯ

ಹೆಸರು:_____ದಿನಾಂಕ:--/--/--

ಅಧ್ಯಯನ ತನಿಖಾಧಿಕಾರಿಯ ಸಹಿ_____

ANNEXURE-IV

INFORMED CONSENT FORM

Name of the Principal Investigator: Ms. Sumana Yesu Priya S H

Asst. Professor

Name of the co-investigators: Ms. Blessy Shiju, Ms Christa Ann Joseph, Ms Christeena Thankachen, Mr Devaraj VR, Ms Lakshmi Parvathy, Ms Lathashree S, Ms Livyamol C Joseph, Ms Riya Anna Samuel, Ms Riya Raphael, Ms Vaishnavi KM, Ms Sireesha SR

Name of The Organisation: Sri Devaraj Urs College of Nursing

Title of the study: "A Study on risk assessment and management of dental carries among primary school children in selected schools of Kolar Taluk".

If you agree to participate in the research study. We will collect information (as per Performa) from you as a person responsible for you or both. We will collect relevant details.

You are invited to participate in the research study. You are being asked to participate in the study because you satisfy our eligibility criteria. The information given in the documents is meant to help you decide whether or not take part. Please be free to ask quarries. I give my consent to collect the information and also can be used for research. Test validation or education as long as my privacy maintained.

I have read the information or it has been read and explained to me in my own language. I have understood the purpose of the study. The nature of information will be collected and disclosed during the study. I had the opportunity to ask questions and the same has been answered to my satisfaction. I understand that I remain free to withdraw from the study at any time and this will not change my future care. I the undersigned agree to participate in this study and authorised to collect personal information of presentation and publication.

Parents signature/ Teachers' signature:

Person obtaining consent and his/her signature:

Principal investigator signature:

Principal investigator.

GUIDE: Ms. Sumana Yesu Priya SH

Asst. professor,

Department of CHN

SDUCON

Tamaka, Kolar

Yours's Sincerely

Ms Blessy Shiju,

Ms Christa Ann Joseph,

Ms Christeena Thankachen,

Mr Devaraj VR,

Ms Lakshmi Parvathy,

Ms Lathashree S,

Ms Livyamol C Joseph,

Ms Riya Anna Samuel,

Ms Riya Raphael,

MS Rosemariya Biju,

Ms Vaishnavi KM

Ms Sireesha SR.

ಮಾಹಿತಿಯುಕ್ತ ಸಮ್ಮತಿ ಪತ್ರ

ಪ್ರಧಾನ ತನಿಖಾಧಿಕಾರಿಯ ಹೆಸರು: ಶ್ರೀಮತಿ ಸುಮನಾ ಯೇಸು ಪ್ರಿಯಾ ಎಸ್.ಎಚ್

ತನಿಖಾಧಿಕಾರಿಯ ಹೆಸರು: ಬ್ಲೆಸ್ಸಿ ಶಿಜು , ಕ್ರಿಸ್ಟಾ ಆನ್ ಜೋಸೆಫ್ , ಕ್ರಿಸ್ಟೀನಾ ಥಂಕಚನ್, ದೇವರಾಜ್ ವಿಆರ್ , ಲಕ್ಷ್ಮಿ ಪಾರ್ವತಿ ಲತಾಶ್ರೀ ಎಸ್, ಲಿವಿ ಅಮೋಲ್ ಸಿ ಜೋಸೆಫ್ , ರಿಯಾ ಅಣ್ಣಾ ಸ್ಯಾಮುಯೆಲ್,ರಿಯಾ ರಾಫೆಲ್ ,ರೋಸ್ಮರಿಯಾ ಬಿಜು, ವೈಷ್ಣವಿಕೆಎಂ ಸಿರೀಶಾ ಎಸ್ಆರ್

ಸಂಸ್ಥೆಯ ಹೆಸರು: ಶ್ರೀ ದೇವರಾಜ್ ಅರ್ಸ್ ಕಾಲೇಜ್ ಆಫ್ ನರ್ಸಿಂಗ್, ಟಮಕ, ಕೋಲಾರ

ಅಧ್ಯಯನದ ಶೀರ್ಷಿಕೆ: "ಕೋಲಾರ ತಾಲಕಿನಲ್ಲಿ ಆಯ್ಕೆ ಮಾಡಿದ ಶಾಲೆಗಳಲ್ಲಿ ಪ್ರಾಥಮಿಕ ಶಾಲಾ ಮಕ್ಕಳಲ್ಲಿ ಅಪಾಯದ ಮೌಲ್ಯಮಾಪನ ಮತ್ತು ಹಲ್ಲಿನ ಕ್ಷಯ ನಿರ್ವಹಣೆಯ ಕುರಿತು ಅಧ್ಯಯನ"

ನೀವು ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ಸಮ್ಮತಿಸಿದರೆ, ನಾನು ನಿಮಗೆ ಅಥವಾ ಎರಡಕ್ಕೂ ಜವಾಬ್ದಾರರಾಗಿರುವ ವ್ಯಕ್ತಿಯಾಗಿ ನಿಮ್ಮಿಂದ ಮಾಹಿತಿಯನ್ನು (ಕಾರ್ಯನಿರ್ವಹಣೆಯ ಪ್ರಕಾರ) ಸಂಗ್ರಹಿಸುತ್ತೇನೆ. ನಾವು ಸಂಬಂಧಿತ ವಿವರಗಳನ್ನು ಸಂಗ್ರಹಿಸುತ್ತೇವೆ.

ಈ ಸಂಶೋಧನಾ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನಿಮ್ಮನ್ನು ಆಹ್ವಾನಿಸಲಾಗಿದೆ. ನಮ್ಮ ಅರ್ಹತಾ ಮಾನದಂಡಗಳನ್ನು ನೀವು ಪೂರೈಸಿರುವ ಕಾರಣ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನಿಮ್ಮನ್ನು ಕೇಳಲಾಗುತ್ತಿದೆ. ನೀಡಿರುವ ಡಾಕ್ಯುಮೆಂಟ್‌ನಲ್ಲಿರುವ ಮಾಹಿತಿಯು ಭಾಗವಹಿಸಬೇಕೆ ಅಥವಾ ಬೇಡವೇ ಎಂಬುದನ್ನು ನಿರ್ಧರಿಸಲು ನಿಮಗೆ ಸಹಾಯ ಮಾಡುತ್ತದೆ. ದಯವಿಟ್ಟು ಯಾವುದೇ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಮುಕ್ತವಾಗಿರಿ. ನಾನು ಮಾಹಿತಿಯನ್ನು ಸಂಗ್ರಹಿಸಲು ನನ್ನ ಸಮ್ಮತಿಯನ್ನು ನೀಡುತ್ತೇನೆ ಮತ್ತು ನನ್ನ ಗೌಪ್ಯತೆಯನ್ನು ಕಾಪಾಡಿಕೊಳ್ಳುವವರೆಗೆ ವೈದ್ಯಕೀಯ ಸಂಶೋಧನೆ, ಪರೀಕ್ಷಾ ಮೌಲ್ಯೀಕರಣ ಅಥವಾ ಶಿಕ್ಷಣಕ್ಕಾಗಿ ಬಳಸಬಹುದು.

ನಾನು ಓದಿದ್ದೇನೆ ಅಥವಾ ಅದನ್ನು ನನ್ನ ಸ್ವಂತ ಭಾಷೆಯಲ್ಲಿ ನನಗೆ ಓದಿದ್ದೇನೆ ಮತ್ತು ವಿವರಿಸಿದ್ದೇನೆ, ಅಧ್ಯಯನದ ಉದ್ದೇಶವನ್ನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ, ಅಧ್ಯಯನದ ಸಮಯದಲ್ಲಿ ಸಂಗ್ರಹಿಸಿದ ಮತ್ತು ಬಹಿರಂಗಪಡಿಸುವ ಮಾಹಿತಿಯ ಸ್ವರೂಪ. ನನಗೆ ಪ್ರಶ್ನೆಗಳನ್ನು ಕೇಳಲು ಅವಕಾಶವಿತ್ತು ಮತ್ತು ನನ್ನ ತೃಪ್ತಿಗೆ ಅದೇ ಉತ್ತರವನ್ನು ನೀಡಲಾಗಿದೆ. ನಾನು ಯಾವುದೇ ಸಮಯದಲ್ಲಿ ಅಧ್ಯಯನದಿಂದ ಹಿಂದೆ ಸರಿಯಲು ಮುಕ್ತನಾಗಿರುತ್ತೇನೆ ಮತ್ತು ಇದು ನನ್ನ ಭವಿಷ್ಯದ ಕಾಳಜಿಯನ್ನು ಬದಲಾಯಿಸುವುದಿಲ್ಲ ಎಂದು ನಾನು ಅರ್ಥಮಾಡಿಕೊಂಡಿದ್ದೇನೆ. ಈ ಅಧ್ಯಯನದಲ್ಲಿ ಭಾಗವಹಿಸಲು ನಾನು ಕೆಳಗೆ ಸಹಿ ಮಾಡಿದ್ದೇನೆ ಮತ್ತು ಪ್ರಸ್ತುತಿ ಮತ್ತು ಪ್ರಕಟಣೆಯ ನನ್ನ ವೈಯಕ್ತಿಕ ಮಾಹಿತಿಯ ಸಂಗ್ರಹಣೆ ಮತ್ತು ಮುಚ್ಚುವಿಕೆಯನ್ನು ಅಧಿಕೃತಗೊಳಿಸುತ್ತೇನೆ.

ಸಹಿ.....

ಪ್ರಧಾನ ತನಿಖಾಧಿಕಾರಿಯ ಸಹಿ.....

ಮಾರ್ಗದರ್ಶನ ಮಾಡಿದರು

ಶ್ರೀಮತಿ ಸುಮನಾ ಯೇಸು ಪ್ರಿಯಾ ಎಸ್.ಎಚ್

ಸಹಾಯಕ ಪ್ರಾಧ್ಯಾಪಕರು

ಸಮುದಾಯ ಆರೋಗ್ಯ ಶುಶ್ರೂಷೆ

ಎಸ್ ಡಿಯು ಸಿ ಒ ಎನ್ ಟಮಕ, ಕೋಲಾರ

ನಿಮ್ಮ ವಿಶ್ವಾಸಿ

1. ಎಂಎಸ್ ಬ್ಲೆಸ್ಸಿ ಶಿಜು
2. ಎಂಎಸ್ ಕ್ರಿಸ್ಟಾ ಆನ್ ಜೋಸೆಫ್
3. ಎಂಎಸ್ ಕ್ರಿಸ್ಟೀನಾ ಥಂಕಚನ್
4. ಶ್ರೀ ದೇವರಾಜ್ ವಿಆರ್
5. ಎಂಎಸ್ ಲಕ್ಷ್ಮಿ ಪಾರ್ವತಿ
6. ಎಂಎಸ್ ಲತಾಶ್ರೀ ಎಸ್
7. ಎಂಎಸ್ ಲೈವಿ ಅಮೋಲ್ ಸಿ ಜೋಸೆಫ್
8. ಎಂಎಸ್ ರಿಯಾ ಅಣ್ಣಾ ಸ್ಯಾಮುಯೆಲ್
9. ಎಂಎಸ್ ರಿಯಾ ರಾಫೆಲ್
10. ಎಂಎಸ್ ರೋಸ್ಮರಿಯಾ ಬಿಜು
11. ಎಂಎಸ್ ವೈಷ್ಣವಿ ಕೆಎಂ
12. ಎಂಎಸ್ ಸಿರೀಶಾ ಎಸ್ಆರ್

ANNEXURE-V

CONTENT VALIDITY CERTIFICATE OF TOOL

NAME :

…….

DESIGNATION :

…….

NAME OF INSTITUTION :

…….

STATEMENTS OF ACCEPTANCE / NON-ACCEPTANCE:

……...

I hereby certify that I have validate the tool of 3rd year B Sc. Nursing students of Sri Devaraj Urs College of Nursing, Tamaka, Kolar, who are undertaking research project as partial fulfillment of Basic BSc Nursing Degree on:

A STUDY ON RISK ASSESSMENT AND MANAGEMENT OF DENTAL CARRIES AMONG PRIMARY SCHOOL CHILDREN IN SELECTED SCHOOLS OF KOLAR TALUK

Place:

Date:

ANNEXUR-VI

LETTER REQUESTING OPINION AND SUGGESTIONS OF EXPERTS FOR ESTABLISHING CONTENT VALIDITY FOR RESEARCH TOOL

From,

Research Students

3rd Year BSc(N)

Sri Devaraj Urs College of Nursing

Tamaka, Kolar

To,

Subject: Requesting for the opinion and suggestion of experts for establishing content validity of research tool. Respected Sir/Madam We the students of basic B.Sc. Nursing 3rd year team belonging to Dept. of Community Health Nursing have selected below mentioned topic for research project for the fulfilment of the requirements of nursing research subject for BSc(N) degree.

Title of the study

"A Study on risk assessment and management of dental carries among primary school children in selected schools of Kolar Taluk".

With the regard to the above, we kindly request your Good-self to validate the tool for its relevancy and adequacy. Hereby, we have enclosed the objectives of the study and content validity certificate for your kind reference. We will be highly obliged and thankful for your great help. Here with, we enclose,

- Statement of the study
- Objective of the study
- Tool of the study

OBJECTIVES OF THE STUDY;

- To assess the risk of dental carries by using standardized tool American Academy of Pediatric Nursing [AAPD]
- To determine effects of dental carries management using AAPD tool for school children [period of three months]

DATA COLLECTION TOOL

The data collection followed in the study involved the following technique.

SECTION – 1

It consists of Name, Age, Gender, Standard, Fathers name, Fathers occupation, Mothers name, Mothers occupation.

SECTION- 2

It consists of risk assessment tool of AAPD.

SECTION – 3

Management by using dietary intervention and teaching [AAPD Tool] oral hygiene to the primary school children.

We, humbly request you to go through the tool and give your valuable suggestions and opinion. Kindly suggest modifications, additions and deletions, if any, in the remark column.

Thanking you, Your sincerely

Ms Blessy Shiju, Ms Christa Ann Joseph, Ms Christeena Thankachen, Mr Devaraj VR, Ms Lakshmi Parvathy, Ms Lathashree S, Ms Livyamol C Joseph, Ms Riya Anna Samuel, Ms Riya Raphael, MS Rosemariya Biju, Ms Vaishnavi KM and Ms Sireesha SR.

Place:

Date:

ANNEXURE-VII

CONTENT VALIDATORS

1. **Dr. G Vijayalakshmi**
   Principal of SDUCON
   Tamaka, Kolar
2. **Dr. Lavanya Subashini**
   HOD of Dept. of Child Health Nursing
   SDUCON Tamaka, Kolar
3. **Dr. Zeenath C J**
   HOD of Dept. of Medical Surgical Nursing
   SDUCON Tamaka, Kolar
4. **Dr. Malathi K V**
   HOD of Dept. of Community Health Nursing
   SDUCON Tamaka, Kolar
5. **Prof. Jairakini Aruna**
   HOD of Dept. of Mental Health Nursing
   SDUCON Tamaka, Kolar
6. **Mrs. Punitha M**
   HOD of Dept. of Obstetrical and Gynaecology
   SDUCON Tamaka, Kolar

ANNEXURE-VIII

DATA COLLECTION TOOL

The data collection followed in the study involved the following technique.

SECTION – 1

It consists of Name, Age, Gender, Standard, Fathers name, Fathers occupation, Mothers name, Mothers occupation.

1. What is your name?
2. How old are you?
3. Gender (boy/girl)
4. Which standard are you in?
5. What is your father's name?
6. What is your father occupation?
7. What is your mother's name?
8. What's your mother's occupation?
9. How many times you brush in a day?
10. Do you eat chocolates?
11. How often do you eat sweets?
12. Will you wash your mouth after having food/Sweets?
13. Do you have pain while chewing food?
14. Do you suffer from swelling or bleeding gums?
15. Have you ever visited any dentist?
16. Do you have any special health care needs?
17. Have you undergone any dental filling?

SECTION- 2

It consists of risk assessment tool of AAPD.

Factors	High Risk	Moderate Risk	Low Risk
Biological			
• Child is low socioeconomic status	Yes		
• Child has between meal sugar- containing snacks or beverages per day	Yes		
• Child has special health care needs		Yes	
• Child is a recent immigrant		Yes	
Protective			
• Child receives optimally – fluoridated drinking water			Yes
• Child brushes teeth daily with fluoridated toothpaste			Yes
• Child receives topical fluoride from health professional			Yes
• Child has dental home/ regular dental care			Yes
Clinical finding			
• Child has active white spots lesions or enamel defects	Yes		
• Child has low salivary flow	Yes		
• Child has defective restorations	Yes	Yes	
• Child wearing an intraoral appliance		Yes	

SECTION – 3

Management by using dietary intervention and teaching [AAPD Tool] oral hygiene to the primary school children.

Risk category	Interventions	
	Fluoride	**Diet**
Low risk	-Twice daily brushing	Counselling
Moderate risk	-Twice daily brushing with fluoridated tooth paste (Techniques of brushing & oral care)	Counselling
High risk	-Twice daily brushing with fluoridated tooth paste -Fluoride supplements (Techniques of brushing & oral care)	Counselling

ಮಾಹಿತಿ ಸಂಗ್ರಹಣೆ ಉಪಕರಣ

ಅಧ್ಯಯನದಲ್ಲಿ ಅನುಸರಿಸಿದ ಮಾಹಿತಿ ಸಂಗ್ರಹಣೆಯು ಈ ಕೆಳಗಿನ ತಂತ್ರವನ್ನು ಒಳಗೊಂಡಿವೆ

ವಿಭಾಗ 1

ಇದು ವಯಸ್ಸು, ಲಿಂಗ, ಧರ್ಮ, ಶಿಕ್ಷಣ, ಸಾಮಾಜಿಕ ಆರ್ಥಿಕ ಸ್ಥಿತಿಯಂತಹ ಸಾಮಾಜಿಕ ಜನಸಂಖ್ಯಾ ಮಾಹಿತಿ ಒಳಗೊಂಡಿದೆ,

ಪೋಷಕರ ಶಿಕ್ಷಣ ಮತ್ತು ಉದ್ಯೋಗ ಇತ್ಯಾದಿ.

1. ನಿಮ್ಮ ಹೆಸರೇನು?

2. ನಿಮ್ಮ ವಯಸ್ಸು ಎಷ್ಟು?

3. ಲಿಂಗ (ಹುಡುಗ/ಹುಡುಗಿ)

4. ನೀವು ಯಾವ ಮಾನದಂಡದಲ್ಲಿದ್ದೀರಿ?

5. ನಿಮ್ಮ ತಂದೆಯ ಹೆಸರೇನು?

6. ನಿಮ್ಮ ತಂದೆಯ ಉದ್ಯೋಗ ಯಾವುದು?

7. ನಿಮ್ಮ ತಾಯಿಯ ಹೆಸರೇನು?

8. ನಿಮ್ಮ ತಾಯಿಯ ಉದ್ಯೋಗ ಯಾವುದು?

9. ನೀವು ದಿನಕ್ಕೆ ಎಷ್ಟು ಬಾರಿ ಹಲ್ಲುಜ್ಜುತ್ತೀರಿ?

10. ನೀವು ಚಾಕೊಲೇಟ್ ತಿನ್ನುತ್ತೀರಾ?

11. ನೀವು ಎಷ್ಟು ಬಾರಿ ಸಿಹಿತಿಂಡಿಗಳನ್ನು ತಿನ್ನುತ್ತೀರಿ?

12. ಆಹಾರ/ಸಿಹಿತಿಂಡಿಗಳನ್ನು ಸೇವಿಸಿದ ನಂತರ ನಿಮ್ಮ ಬಾಯಿಯನ್ನು ತೊಳೆಯುತ್ತೀರಾ?

13. ಆಹಾರವನ್ನು ಜಗಿಯುವಾಗ ನಿಮಗೆ ನೋವು ಇದೆಯೇ?

14. ನೀವು ಒಸಡುಗಳಲ್ಲಿ ಊತ ಅಥವಾ ರಕ್ತಸ್ರಾವದಿಂದ ಬಳಲುತ್ತಿದ್ದೀರಾ?

15. ನೀವು ಎಂದಾದರೂ ಯಾವುದೇ ದಂತವೈದ್ಯರನ್ನು ಭೇಟಿ ಮಾಡಿದ್ದೀರಾ?

16. ನೀವು ಯಾವುದೇ ವಿಶೇಷ ಆರೋಗ್ಯ ಅಗತ್ಯಗಳನ್ನು ಹೊಂದಿದ್ದೀರಾ?

17. ನೀವು ಯಾವುದೇ ದಂತ ತುಂಬುವಿಕೆಗೆ ಒಳಗಾಗಿದ್ದೀರಾ?

ವಿಭಾಗ- 2

ಇದು AAPD ಯ ಅಪಾಯದ ಮೌಲ್ಯಮಾಪನ ಸಾಧನವನ್ನು ಒಳಗೊಂಡಿದೆ.

ಅಂಶಗಳು	ಹೆಚ್ಚಿನ ಅಪಾಯ	ಮಧ್ಯಮ ಅಪಾಯ	ಕಡಅಪಾಯ
• **ಜೈವಿಕ** • ಮಗುವಿನ ಸಾಮಾಜಿಕ ಆರ್ಥಿಕ ಸ್ಥಿತಿ ಕಡಿಮೆಯಾಗಿದೆ • ಮಗುವಿಗೆ ಊಟದ ನಡುವೆ ಸಕ್ಕರೆ-ಒಳಗೊಂಡಿರುವ ತಿಂಡಿಗಳು • ಮಗುವಿಗೆ ವಿಶೇಷ ಆರೋಗ್ಯ ಅಗತ್ಯತೆಗಳಿವೆ • ಮಗು ಇತ್ತೀಚೆಗೆ ವಲಸೆ ಬಂದವನು	ಹೌದು ಹೌದು	ಹೌದು ಹೌದು	
• ರಕ್ಷಣಾತ್ಮಕ • ಮಗು ಫ್ಲೋರೈಡಯುಕ್ತ ಕುಡಿಯುವ ನೀರನ್ನು ಅತ್ಯುತ್ತಮವಾಗಿ ಪಡೆಯುತ್ತದೆ • ಫ್ಲೋರೈಡ್ ಟೂತ್‌ಪೇಸ್ಟ್‌ನಿಂದ ಮಗು ಪ್ರತಿದಿನ ಹಲ್ಲುಜ್ಜುತ್ತದೆ • ಮಗು ಆರೋಗ್ಯ ವೃತ್ತಿಪರರಿಂದ ಸ್ಥಳೀಯ ಫ್ಲೋರೈಡ್ ಅನ್ನು ಪಡೆಯುತ್ತದೆ • ನಿಯಮಿತ ಹಲ್ಲಿನ ಆರೈಕೆ			ಹೌದು ಹೌದು ಹೌದು ಹೌದು ಹೌದು
• **ಕ್ಲಿನಿಕಲ್ ಸಂಶೋಧನೆ** • ಮಗುವಿಗೆ ಸಕ್ರಿಯ ಬಿಳಿ ಚುಕ್ಕೆಗಳ ಗಾಯಗಳು ಅಥವಾ ದಂತಕವಚ ದೋಷಗಳಿವೆ • ಮಗುವಿಗೆ ಕಡಿಮೆ ಲಾಲಾರಸದ ಹರಿವು ಇದೆ • ಮಗುವಿಗೆ ದೋಷಯುಕ್ತ ಮರುಸ್ಥಾಪನೆ ಇದೆ	ಹೌದು ಹೌದು ಹೌದು	ಹೌದು ಹೌದು	

ವಿಭಾಗ - 3

ಪ್ರಾಥಮಿಕ ಶಾಲಾ ಮಕ್ಕಳಿಗೆ ಆಹಾರದ ಮಧ್ಯಸ್ಥಿಕೆ ಮತ್ತು [AAPD ಉಪಕರಣ] ಮೌಖಿಕ ನೈರ್ಮಲ್ಯವನ್ನು ಬೋಧಿಸುವ ಮೂಲಕ ನಿರ್ವಹಣೆ.

ಅಪಾಯದ ವರ್ಗ	ಮಧ್ಯಸ್ಥಿಕೆಗಳು	
	ಫ್ಲೋರೈಡ್	ಆಹಾರ ಪದ್ಧತಿ
ಕಡಿಮೆ ಅಪಾಯ	-ದಿನಕ್ಕೆ ಎರಡು ಬಾರಿ ಹಲ್ಲುಜ್ಜುವುದು	ಸಮಾಲೋಚನೆ
ಮಧ್ಯಮ ಅಪಾಯ	- ಫ್ಲೋರೈಡ್ ಟೂತ್ ಪೇಸ್ಟ್ ನಿಂದ ದಿನಕ್ಕೆ ಎರಡು ಬಾರಿ ಹಲ್ಲುಜ್ಜುವುದು (ಹಲ್ಲುಜ್ಜುವುದು ಮತ್ತು ಮೌಖಿಕ ಆರೈಕೆಯ ತಂತ್ರಗಳು)	ಸಮಾಲೋಚನೆ
ಹೆಚ್ಚಿನ ಅಪಾಯ	- ಫ್ಲೋರೈಡ್ ಟೂತ್ ಪೇಸ್ಟ್ ನಿಂದ ದಿನಕ್ಕೆ ಎರಡು ಬಾರಿ ಹಲ್ಲುಜ್ಜುವುದು - ಫ್ಲೋರೈಡ್ ಪೂರಕಗಳು (ಬ್ರಶಿಂಗ್ ಮತ್ತು ಮೌಖಿಕ ಆರೈಕೆಯ ತಂತ್ರಗಳು)	ಸಮಾಲೋಚನೆ

ANNEXURE-IX

MASTER DATA SHEET

PRETEST EXPERIMENTAL GROUP

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Bio logical	Protective	Clinical finding	Risk Category
1	Abishek	9 yrs	Boy	3rd std	Bhasavaraj	Welding	Prema	Housewife	1 times	Yes	Sometimes	No	No	No	No	No	No	1	3	0	Low risk
2	Chaithra shree	10yrs	Girl	5th std	Manjunath	Lawyer	Manjula	Teacher	1 times	Yes	Sometimes	No	Yes	No	No	Yes	No	1	3	0	Low risk
3	Deepak	5yrs	Boy	1st std	Eshwarappa	Farmer	Shamandamma	Kooli	1 times	Yes	everyday	No	Yes	Yes	No	No	No	2	0	2	Moderate risk
4	Charanya	10yrs	Girl	1st std	Naveen	Kooli	Venkatlakshmi	Housewife	1 times	Yes	everyday	No	No	No	No	No	No	1	3	0	Low risk
5	Ganavi S	8yrs	Girl	2nd std	Subramani	Attender	Prema	Housewife	1 times	Yes	Sometimes	No	No	No	No	No	No	2	0	2	Moderate risk
6	J Kusuma	10yrs	Girl	5th std	Jayanath	Farmer	Vinodha	Cooking	1 times	Yes	3 days once	No	No	No	No	No	No	2	0	2	Moderate risk
7	Jeevitha	10yrs	Girl	4th std	Balaji	Farmer	Meenakka	Housewife	1 times	Yes	Weekly once	No	No	No	No	No	No	1	2	1	Low risk
8	Kusheeka	6yrs	Girl	1st std	Mahesh	Business	Aruna	Kooli	2 times	Yes	everyday	Yes	No	No	No	No	No	1	2	0	Low risk
9	Lahari V	10yrs	Girl	5th std	Venkata chalapati	Kooli	Lakshmi Deve	Kooli	1 times	Yes	everyday	No	No	No	No	No	No	0	3	1	Low risk
10	Layashree	10yrs	Girl	5th std	venkatesh	Farmer	Sarasamma	Kooli	1 times	Yes	everyday	No	No	No	No	No	No	2	0	2	Moderate risk
11	Likith Kumar	10yrs	Boy	5th std	Shivaraj	Business	Aruna	Kooli	1 times	Yes	everyday	No	Yes	No	No	No	No	3	1	2	High risk
12	Likith Raj P	9yrs	Boy	3rd std	Pradheep Kumar	Farmer	Sanjana	Housewife	1 times	Yes	everyday	No	No	No	No	No	No	3	1	2	High risk
13	Mahalakshmi K N	10yrs	Girl	5th std	Nagesh G	Farmer	Vasandha V	Housewife	1 times	Yes	everyday	No	No	No	No	No	No	2	0	2	Moderate risk

14	Manasa A	7 yrs	Girl	2nd std	Anand	Farmer	Shashikala	Housewife	1 times	Yes	everyday	No	No	No	Yes	Yes	No	3	0	2	High risk
15	Nandan	10yrs	Boy	5th std	Sriniva	Kooli	Asha	Tailor	1 times	Yes	Sometimes	No	No	No	No	No	No	2	0	2	Moderate risk
16	Navaneeth	9yrs	Boy	3rd std	Lakshmana	Farmer	Manjula	Housewife	1 times	Yes	everyday	No	No	No	No	No	No	2	0	2	Moderate risk
17	Naveen	9yrs	Boy	3rd std	Srinivas	Farmer	Radha	Housewife	2 times	Yes	everyday	No	No	No	No	No	No	2	0	2	Moderate risk
18	Nithin kumar	6yrs	Boy	2nd std	Basavaraj	Farmer	Prema	Housewife	1 times	Yes	everyday	No	No	No	No	No	No	2	0	2	Moderate risk
19	Preethi shree	10yrs	Girl	4th std	Chalapathi	Farmer	Nethra	Housewife	1 times	Yes	Sometimes	No	No	No	No	No	No	2	1	2	Moderate risk
20	Pranith prasad	7yrs	Boy	2nd std	Santhosh	Farmer	Geethashree	Housewife	1 times	Yes	everyday	No	No	No	No	No	No	2	3	3	Moderate Risk
21	Punith Rajkumar	9yrs	Boy	3rd std	Balaji	Farmer	Venaka	Housewife	1 times	Yes	Everyday	No	No	No	No	No	No	2	1	2	Moderate risk
22	Rahul	10yrs	Boy	5th std	Muniswamy	Farmer	Radhamma	Housewife	1 times	Yes	everyday	No	No	No	No	No	No	2	0	2	Moderate risk
23	Ram charan	6yrs	Boy	3rd std	Naveen	Farmer	Raji	Housewife	1 times	Yes	everyday	No	Yes	Yes	No	No	No	2	0	2	Moderate risk
24	Rakshitha	8yrs	Boy	3rd std	Muniswamy	Farmer	Geetha	Housewife	1 times	Yes	everyday	No	No	No	No	No	No	2	0	2	Moderate risk
25	Ranjith	10yrs	Boy	5th std	Muniraju	Driver	Pavithra	Kooli	1 times	Yes	Sometimes	No	No	No	No	No	No	2	1	2	Moderate risk
26	Ruthwika	8yrs	Girl	2nd std	Prasanna Kumar	Driver	Kavitha k	Teacher	1 times	Yes	everyday	No	No	No	No	No	No	1	3	0	Low risk
27	Sahana L	9yrs	Girl	3rd std	Late Lakshmappa		Ratnamma	Farmer	1 times	Yes	everyday	No	No	No	No	No	No	2	0	2	Moderate risk
28	Savanth	10yrs	Boy	4th std	Manjunath	Driver	Arathy	Farmer	1 times	Yes	everyday	No	No	No	No	No	No	1	3	0	Low risk
29	Soma shekhar	8 yrs	Boy	4th std	Gopal Krishna	Security	Shashikala	Housewife	1 times	Yes	everyday	No	No	No	No	No	No	1	2	0	Low risk
30	Yash	6yrs	Boy	1st std	Jagadeesh	Farmer	shilpa	Housewife	1 times	Yes	everyday	No	No	No	No	No	No	2	1	2	Moderate risk

POSTTEST EXPERIMENTAL GROUP

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Bio logical	Protective	Clinical Findings	Risk Category
1	Abishek	9 yrs	Boy	3rd std	Bhasavaraj	Welding	Prema	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
2	Chaithra shree	10yrs	Girl	5th std	Manjunath	Lawyer	Manjula	Teacher	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
3	Deepak	5yrs	Boy	1st std	Eshwarappa	Farmer	Shamandamma	Kooli	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
4	Charanya	10yrs	Girl	1st std	Naveen	Kooli	Venkatlakshmi	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
5	Ganavi S	8yrs	Girl	2nd std	Subramani	Attender	Prema	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
6	J Kusuma	10yrs	Girl	5th std	Jayanath	Farmer	Vinodha	Cooking	2	Yes	Some times	Yes	No	No	No	No	No	2	3	2	Low risk
7	Jeevitha	10yrs	Girl	4th std	Balaji	Farmer	Meenakka	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
8	Kusheeka	6yrs	Girl	1st std	Mahesh	Business	Aruna	Kooli	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
9	Lahari V	10yrs	Girl	5th std	Venkata chalapati	Kooli	Lakshmi Deve	Kooli	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
10	Laya shree	10yrs	Girl	5th std	venkatesh	Farmer	Sarasamma	Kooli	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
11	Likith Kumar	10yrs	Boy	5th std	Shivaraj	Business	Aruna	Kooli	2	Yes	Some times	Yes	No	No	No	No	No	2	2	2	Moderate risk
12	Likith Raj P	9yrs	Boy	3rd std	Pradheep Kumar	Farmer	Sanjana	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	2	2	2	Moderate risk
13	Maha lakshmi K N	10yrs	Girl	5th std	Nagesh G	Farmer	Vasandha V	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
14	Manasa A	7 yrs	Girl	2nd std	Anand	Farmer	Shashikala	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	1	Low risk

15	Nandan	10 yrs	Boy	5th std	Sriniva	Kooli	Asha	Tailor	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
16	Navaneeth	9yrs	Boy	3rd std	Lakshmana	Farmer	Manjula	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
17	Naveen	9yrs	Boy	3rd std	Srinivas	Farmer	Radha	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
18	Nithin kumar	6yrs	Boy	2nd std	Basavaraj	Farmer	Prema	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
19	Preethi shree	10yrs	Girl	4th std	Chalapathi	Farmer	Nethra	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
20	Pranith prasad	7yrs	Boy	2nd std	Santhosh	Farmer	Geethashree	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
21	Punith Rajkumar	9yrs	Boy	3rd std	Balaji	Farmer	Venaka	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
22	Rahul	10yrs	Boy	5th std	Muni swamy	Farmer	Radhamma	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
23	Ram charan	6yrs	Boy	3rd std	Naveen	Farmer	Raji	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
24	Rakshitha	8yrs	Boy	3rd std	Muni swamy	Farmer	Geetha	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
25	Ranjith	10yrs	Boy	5th std	Muniraju	Driver	Pavithra	Kooli	2	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low risk
26	Ruthwika	8yrs	Girl	2nd std	Prasanna Kumar	Driver	Kavitha k	Teacher	2	Yes	Some times	Yes	No	No	No	No	No	0	3	0	Low risk
27	Savanth	10yrs	Boy	4th std	Manju nath	Driver	Arathy	Farmer	2	Yes	Some times	Yes	No	No	No	No	No	0	3	0	Low risk
28	Soma shekhar	8 yrs	Boy	4th std	Gopal Krishna	Security	Shashikala	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	0	3	0	Low risk
29	Yash	6yrs	Boy	1st std	Jaga deesh	Farmer	shilpa	Housewife	2	Yes	Some times	Yes	No	No	No	No	No	0	3	0	Low risk
30	Sahana L	9yrs	Girl	3rd std	Laksh mappa		Rathnamma	Farmer	2	Yes	Some times	Yes	No	No	No	No	No	2	1	2	Moderate risk

PRETEST CONTROL GROUP

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Bio logical	Prot ective	Clinical Finding	Risk Category
1	Akhil	8	Boy	3	Narendra	Driver	Nagamany	House wife	1	Yes	Daily	No	No	No	No	No	No	2	0	2	Moderate Risk
2	Amritha	10	Girl	4	Subramani	Agri culture	Saraswathy	Farmer	1	Yes	Some times	No	No	No	No	No	No	3	0	2	High Risk
3	Ashwin	9	Boy	3	Narayana swamy	Farmer	Anitha	House wife	1	Yes	Some times	No	Yes	Yes	No	Yes	No	3	0	2	High Risk
4	Bhavana	9	Girl	3	Narayana swamy	Security	Savitha	Tailorimg	1	Yes	Every day	No	Yes	No	No	Yes	No	3	0	2	High Risk
5	Bhavani	7	Girl	3	Govind	Farmer	Soumya	Tailoring	1	Yes	Every day	Yes	No	No	No	No	No	3	0	2	High Risk
6	Chandana	10	Girl	4	Sunil Kumar	Hotel	Patma	House wife	1	Yes	Every day	No	Yes	Yes	No	No	No	3	0	2	High Risk
7	Chandana	10	Girl	5	MunirJU	Diary worker	Sukanya	Teacher	1	Yes	Every day	No	No	No	No	No	No	2	0	2	Moderate Risk
8	Chandan	7	Boy	2	Kishore	Driver	Shantha	House wife	1	Yes	Every day	No	No	No	No	No	No	2	0	2	Moderate Risk
9	Charu	7	Girl	2	Rangesh	Farmer	Sujatha	House wife	1	Yes	Some times	No	No	No	No	No	No	3	0	2	High Risk
10	Chuchana	10	Girl	5	Sriram	Security	Kalavathy	House wife	1	Yes	Daily	No	No	No	No	No	No	2	0	2	Moderate Risk
11	Dhanu shree	10	Girl	4	Venkatesh	Clerk	Arathy	Teacher	1	Yes	Daily	No	No	No	No	No	No	2	0	2	Moderate Risk
12	Gautham	9	Boy	4	Raju	Factory	Rekha	Housewife	1	Yes	Every day	No	No	No	No	No	No	3	0	2	High Risk
13	Hari prasad	8	Boy	2	Sunil Kumar	Hotel	Patma	Hotel	1	Yes	Every day	No	No	No	No	No	No	2	0	2	Moderate Risk
14	Jaiba Khanan	9	Girl	4	Fayaz	Farmer	Farzana	Housewife	1	Yes	Daily	No	No	No	No	No	No	2	0	3	High Risk
15	Jayanth	9	Boy	3	Muniraju	Diary worker	Sujanya	Teacher	1	Yes	Every day	No	No	Yes	No	No	No	2	0	2	Moderate Risk

16	Lakshmi	7	Girl	2	Suresh	Shop	Kantha	Housewife	1	Yes	Every day	No	Yes	Yes	No	No	No	2	0	2	Moderate Risk
17	Lakshmi Pathy	10	Boy	4	Nagudappa	Painter	Manjula	Housewife	1	Yes	Daily	No	No	No	No	No	No	2	0	3	High Risk
18	Nandana	7	Girl	2	Murali	Driver	Swatjy	Housewife	1	Yes	Every day	No	No	No	No	No	No	2	0	3	High Risk
19	Nithin N Gowda	10	Boy	5	Krishnappa	Attender	Sumithra	chef	1	Yes	Daily	No	No	No	No	No	No	2	0	3	High Risk
20	Prathishta	7	Girl	2	Jayananth	Agri culture	Charithra	Farmer	1	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low Risk
21	Sanavi	9	Girl	2	Munishappa	Farmer	Lavanya	Housewife	1	Yes	Every Day	No	Yes	Yes	No	No	No	2	0	3	High Risk
22	Sanjana	10	Girl	5	Narayana swamy	Driver	Savithri	Housewife	1	Y	Some times	No	No	No	No	No	No	2	0	2	Moderate Risk
23	Shreyas	10	Boy	5	Chirangavi	Farmer	Mangala	Farmer	1	Yes	Every day	No	Yes	Yes	No	No	No	2	0	3	High Risk
24	Shreyas	10	Boy	4	Thimrashi	Conducter	Sudharani	Housewife	1	Yes	Every day	No	Yes	Yes	No	No	No	2	0	3	High Risk
25	Sudarshan	8	Boy	2	Suri	Bakery	Rukmini	Baker	1	Yes	Every day	No	No	No	No	No	No	2	0	3	High Risk
26	Tanush	7	Boy	2	Manjunath	kooli	Naagaveny	Housewife	1	Yes	Daily	No	No	No	No	No	No	2	0	3	High Risk
27	Tanvitha	8	Girl	3	Nagaraj	Head master	Manjula	Tailoring	1	Yes	Every day	Yes	No	No	No	No	No	1	3	0	Low Risk
28	Vedanth	9	Boy	3	Sambath	Security	Shashikala	Housewife	1	Yes	Daily	No	No	No	No	No	No	2	0	3	High Risk
29	Vidhya shree	9	Girl	4	Vinod Kumar	Driver	Nilaja	Housewife	1	Yes	Every day	No	No	No	No	No	No	2	0	2	Moderate Risk
30	Vinaya Kumar	9	Boy	4	Muniraju	Hotel	Vagrahwan	Hotel	1	Yes	Some times	No	No	No	No	No	No	1	3	0	Low Risk

POST TEST CONTROL GROUP

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Bio logical	Prot ective	Clinical Finding	Risk Category
1	Akhil	8	Boy	3	Narendra	Driver	Nagamany	House wife	1	Yes	Daily	No	No	No	No	No	No	2	0	2	Moderate Risk
2	Amritha	10	Girl	4	Subramani	Agri culture	Saraswathy	Farmer	1	Yes	Some times	No	No	No	No	No	No	3	0	2	High Risk
3	Ashwin	9	Boy	3	Narayana swamy	Farmer	Anitha	House wife	1	Yes	Some times	No	Yes	Yes	No	Yes	No	3	0	2	High Risk
4	Bhavana	9	Girl	3	Narayana swamy	Security	Savitha	Tailorimg	1	Yes	Every day	No	Yes	No	No	Yes	No	3	0	2	High Risk
5	Bhavani	7	Girl	3	Govind	Farmer	Soumya	Tailoring	1	Yes	Every day	Yes	No	No	No	No	No	3	0	2	High Risk
6	Chandana	10	Girl	4	Sunil Kumar	Hotel	Patma	House wife	1	Yes	Every day	No	Yes	Yes	No	No	No	3	0	2	High Risk
7	Chandana	10	Girl	5	MunirJU	Diary worker	Sukanya	Teacher	1	Yes	Every day	No	No	No	No	No	No	2	0	2	Moderate Risk
8	Chandan	7	Boy	2	Kishore	Driver	Shantha	House wife	1	Yes	Every day	No	No	No	No	No	No	2	0	2	Moderate Risk
9	Charu	7	Girl	2	Rangesh	Farmer	Sujatha	House wife	1	Yes	Some times	No	No	No	No	No	No	3	0	2	High Risk
10	Chuchana	10	Girl	5	Sriram	Security	Kalavathy	House wife	1	Yes	Daily	No	No	No	No	No	No	2	0	2	Moderate Risk
11	Dhanu shree	10	Girl	4	Venkatesh	Clerk	Arathy	Teacher	1	Yes	Daily	No	No	No	No	No	No	2	0	2	Moderate Risk
12	Gautham	9	Boy	4	Raju	Factory	Rekha	Housewife	1	Yes	Every day	No	No	No	No	No	No	3	0	2	High Risk
13	Hari prasad	8	Boy	2	Sunil Kumar	Hotel	Patma	Hotel	1	Yes	Every day	No	No	No	No	No	No	2	0	2	Moderate Risk
14	Jaiba Khanan	9	Girl	4	Fayaz	Farmer	Farzana	Housewife	1	Yes	Daily	No	No	No	No	No	No	2	0	3	High Risk
15	Jayanth	9	Boy	3	Muniraju	Diary worker	Sujanya	Teacher	1	Yes	Every day	No	No	Yes	No	No	No	2	0	2	Moderate Risk

16	Lakshmi	7	Girl	2	Suresh	Shop	Kantha	Housewife	1	Yes	Every day	No	Yes	Yes	No	No	No	2	0	2	Moderate Risk
17	Lakshmi Pathy	10	Boy	4	Nagudappa	Painter	Manjula	Housewife	1	Yes	Daily	No	No	No	No	No	No	2	0	3	High Risk
18	Nandana	7	Girl	2	Murali	Driver	Swatjy	Housewife	1	Yes	Every day	No	No	No	No	No	No	2	0	3	High Risk
19	Nithin N Gowda	10	Boy	5	Krishnappa	Attender	Sumithra	chef	1	Yes	Daily	No	No	No	No	No	No	2	0	3	High Risk
20	Prathishta	7	Girl	2	Jayananth	Agri culture	Charithra	Farmer	1	Yes	Some times	Yes	No	No	No	No	No	1	3	0	Low Risk
21	Sanavi	9	Girl	2	Munishappa	Farmer	Lavanya	Housewife	1	Yes	Every Day	No	Yes	Yes	No	No	No	2	0	3	High Risk
22	Sanjana	10	Girl	5	Narayana swamy	Driver	Savithri	Housewife	1	Y	Some times	No	No	No	No	No	No	2	0	2	Moderate Risk
23	Shreyas	10	Boy	5	Chirangavi	Farmer	Mangala	Farmer	1	Yes	Every day	No	Yes	Yes	No	No	No	2	0	3	High Risk
24	Shreyas	10	Boy	4	Thimrashi	Conducter	Sudharani	Housewife	1	Yes	Every day	No	Yes	Yes	No	No	No	2	0	3	High Risk
25	Sudarshan	8	Boy	2	Suri	Bakery	Rukmini	Baker	1	Yes	Every day	No	No	No	No	No	No	2	0	3	High Risk
26	Tanush	7	Boy	2	Manjunath	kooli	Naagaveny	Housewife	1	Yes	Daily	No	No	No	No	No	No	2	0	3	High Risk
27	Tanvitha	8	Girl	3	Nagaraj	Head master	Manjula	Tailoring	1	Yes	Every day	Yes	No	No	No	No	No	1	3	0	Low Risk
28	Vedanth	9	Boy	3	Sambath	Security	Shashikala	Housewife	1	Yes	Daily	No	No	No	No	No	No	2	0	3	High Risk
29	Vidhya shree	9	Girl	4	Vinod Kumar	Driver	Nilaja	Housewife	1	Yes	Every day	No	No	No	No	No	No	2	0	2	Moderate Risk
30	Vinaya Kumar	9	Boy	4	Muniraju	Hotel	Vagrahwan	Hotel	1	Yes	Some times	No	No	No	No	No	No	1	3	0	Low Risk

ANNEXURE-X

PHOTO GALLERY


GPS Map Camera
Vadagur, Karnataka, India
46P3+WR7, kembodi, Karnataka 563103, India
Lat 13.137272°
Long 78.204354°
06/10/23 10:53 AM GMT +05:30
Google

ANNEXURE-XI