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A Study To Evaluate The Effectiveness Of Self Instructional Module (Sim) In Terms Of Knowledge Regarding Oral Hygiene Status Of School Children In The Age Group 6-14 Years In The Selected Schools At Lucknow.

Author-

1) Mrs. Sony Verma, M.Sc. Nursing (Child Health Nursing), Assistant Professor*,
Faculty of Nursing, Uttar Pradesh University of Medical Sciences Saifai , Etawah.

2) Mrs. Monika Bhushan, M.Sc. Nursing (Community Health Nursing), Lecturer,**
Faculty of Nursing, Uttar Pradesh University of Medical Sciences Saifai, Etawah.

3) Mrs Ramya.S, M.Sc Nursing, Child Health Nursing Assistant professor*, ,College of Nursing,
All India Institute of Medical Sciences, Patna.(AIIMS)

Assistant Professor*, Lecturer**

UTTAR PRADESH UNIVERSITY OF MEDICAL SCIENCES SAIFAI, ETAWAH, U.P.
ALL INDIA NSTITUTE OF MEDICAL SCIENCES , PATNA. (AIIMS)

ABSTRACT:-

Oral health (OH) is an important component of overall human health and is inextricably linked with physical, social and mental health, and quality of life. In children, poor oral hygiene and untreated oral disease have a devastating impact on individual growth and development. According to the World Health Organization (WHO), poor OH can have a negative effect on children's performance at school and impacts their future academic success. Oral health problems also reduce people's ability to smile, eat, and talk, and have a detrimental effect upon their social and mental health. ***Tooth decay and gum disease are common affecting more than 26% of school aged children globally.*** Over 66 million school hours per year are lost due to OH-related problems. Oral

disease is also more prevalent among children in developing countries compared to developed ones. For instance, the prevalence of dental caries is 53% among four-year-old children in countries such as India and China, and 40% in South Africa, while it is 32% in England and 22% in Italy. While the WHO has set an ambitious goal to reduce the mean decayed, missing, and filled teeth (DMFT) index to less than one a recent study in Kurdistan province Iran, found the DMTF in 2000 people aged 15–40 to be 7.33 ± 3.0. As children are highly susceptible to tooth decay, investigating dental caries indexes and understanding the factors affecting them is an important public health goal.

KEYWORDS:- Effectiveness, Oral Hygiene, Self Instructional Module, tooth decay,

INTRODUCTION: As you might guess, the number-one dental problem among preschoolers is ***tooth decay*.**

- ✓ One out of 10 two- year-olds already have one or more cavities
- ✓ By age three, 28% of children have one or more cavities
- ✓ By age five, nearly 50% of children have one or more cavities

"Many parents assume that cavities in baby teeth don't matter, because they'll be lost anyway. But that's not true. Dental decay in baby teeth can negatively affect permanent teeth and lead to future dental problems."

TEACHING GOOD DENTAL HABITS: The best way to protect your child's teeth is to teach him good dental habits. With the proper coaching he'll quickly adopt good oral hygiene as a **part of his daily routine.** for areas of brown or white spots which might be signs of early decay.

1) **Toothbrushing:** As soon as your child has a tooth you should be helping your child brush her teeth two times a day with a smear (size of a grain of rice) of fluoride toothpaste on a child-sized toothbrush that has soft bristles. There are brushes designed to address the different needs of children at all ages, ensuring that you can select a toothbrush that is appropriate for your child.
2) **Amount of Toothpaste:** At age 3, you can start using a pea-size amount of fluoride toothpaste, which helps prevent cavities. If your child doesn't like the taste of the toothpaste, try another flavor. Also try to teach your child not to swallow it, although at this age they are often still too young to learn to rinse and spit. Swallowing too much fluoride toothpaste can make white or brown spots on your child's adult teeth.
3) **Brushing Motion:** You'll hear all kinds of advice on whether the best brushing motion is up and down, back and forth, or around in circles. The truth is that the direction really doesn't matter. What's important is to clean each tooth thoroughly, top and bottom, inside and out. This is where you'll encounter resistance from your child, who probably will concentrate on only the front teeth that he can see.

4) **Too Much Sugar:** Besides regular toothbrushing with the right amount of fluoride toothpaste, your child's diet will play a key role in his dental health. And, of course, sugar is the big villain. The longer and more frequently his teeth are exposed to sugar, the greater the risk of cavities. **"Sticky sugar" foods such as sticky caramel, toffee, gum, and dried fruit—particularly when it stays in his mouth and bathes his teeth in sugar for hours—could do serious damage.**
5) **Dental Checkups:** During regular well-child visits, the pediatrician will check your child's teeth and gums to ensure their health. If she notices problems, she may refer your child to a pediatric dentist (pedodontist) or a general dentist with an interest in treating the dental needs of children. **Both the American Academy of Pediatrics and the American Academy of Pediatric Dentistry recommend that all children see a pediatric dentist and establish a "dental home" by age one.**

TOOTH DECAY: Tooth decay (cavities) can happen when teeth are not cared for. Cavities are caused by plaque (plak). Plaque is a harmful layer of bacteria that forms on the teeth. When your child eats food or takes medicine that has sugar in it, the bacteria produce acids. These acids harm the teeth and make cavities form. Cavities happen faster in baby teeth than in adult teeth.

Cavities can cause:

- harm to permanent teeth that have not come in yet
- pain
- infections that can affect the whole body
- costly dental or emergency care
- missed daycare or school days

HOW TO CLEAN YOUR CHILD'S MOUTH: Before and after the teeth come in, clean your child's mouth after each feeding or at least twice at day.

1. Before and after the teeth come in, clean your child's mouth after each feeding or at least twice a day. Place your child in a position that is comfortable for both of you. You should be able to see easily inside their mouth.
2. Before teeth come in, use a clean gauze pad or soft cloth over your finger. Dip the gauze in water so it is damp, but not soaking wet. Wipe your child's teeth and gums gently.
3. When your child's teeth start coming in, begin to use a small, soft toothbrush. Place the head (bristles) of the toothbrush at an angle along a row of teeth and against the gum line. Brush gently in circular motions. Brushing back and forth can hurt the gums and teeth. Do all sides of the teeth.
4. Finish by brushing the tongue with the toothbrush.

5. All children should use **fluoride** toothpaste as soon as the first tooth comes in. For children younger than 3, use about the size of a grain of rice. For children age 3 and older, use a pea-size amount (Picture 3). They should try to spit out the toothpaste, but it is safe to swallow these small amounts if your child does not spit yet.

PREVENTION OF TOOTH DECAY: Be careful that your child is not eating or drinking frequently throughout the day. Each time your child drinks or eats something, within 20 minutes, the sugar in it is changed into an acid.

- Use a bottle at feeding time only. Do not use a bottle or breastfeeding as a pacifier.
- Do not put your baby to bed with a bottle of formula or breastmilk.
- If your baby falls asleep while breastfeeding, remove breast from their mouth.
- Once the first tooth appears, avoid night feedings and frequent, on demand feedings.
- Wean your baby from a bottle to a cup by 12 months of age.
- After your child turns one, if thirsty, they can sip water at any time during the day. Do not give them other things to drink, except at meals.

Fluoride: Fluoride makes teeth stronger and helps protect them from tooth decay. After your child's first tooth appears, the dentist or dental hygienist may put a coat of fluoride on their teeth.

Diet: Follow these given points

- ❖ Do not give a child under age one sugary drinks, juice or water. Give only breastmilk or formula. Do not add sugars, like honey, to drinks.
- ❖ After 12 months, offer water between meals. Do not give other things to drink except at meals. Rinse the mouth with water after eating anything sugary. Children can occasionally have 4 ounces of 100% juice at a meal. Be sure that you are not giving juice drinks.
- ❖ Avoid giving gummy snacks and foods that can stick and stay on teeth for a long time.
- ❖ As your child gets older, offer more raw, crunchy fruits and vegetables, cheese and yogurt for snacks. Limit starchy soft foods that can stick to teeth.

OBJECTIVES OF THE STUDY:-

- To assess the pre-existing knowledge level of school children regarding oral hygiene at selected areas of Lucknow, U.P.
- To determine the effectiveness of self instructional module among the school children regarding oral hygiene in selected school of Lucknow.

METHODOLOGY:

- **Research Approach:** Quantitative approach – Experimental
- **Research Design:** True-experimental pre-test- post test design
- **Population:** In this study population consists of school children of Lucknow, U.P.
- **Site and setting of the study:** The selected schools were the sites & the class rooms of the selected schools were the setting.
- **Sampling Technique:** Probability technique adapting simple Random technique
- **Sample and Sample Size:** School children in selected schools at Lucknow District. Total sample size consists of 300 (Experimental group 150 samples and control group 150 samples)
- **Variables: 1) Independent Variable:** Self Instructional Module
  2) Dependent Variable: knowledge on Self instructional Module regarding Oral Hygiene of school children in selected schools of Lucknow.
- **Tools:**
  - **Part 1:** It consists of the socio demographic data of the participants under the study.
  - **Part 2:** It consists of a structured knowledge questionnaire to assess the knowledge level regarding oral hygiene among the school children in selected schools of Lucknow.
  - **Part 3:** It consists of Self instructional module on oral hygiene in school children from selected school of Lucknow, U.P.

RESULT:-

- ✓ It shows in experimental group, pre-test knowledge scores of school Children were 70% poor, 27% average and 3% excellent while in post-test the knowledge score of school children were 17% average, 80% excellent and 03% poor.
- ✓ It shows in control group, pre-test knowledge scores of school children were 76% poor, 20% average and 04% excellent while in post-test the knowledge score of school children were 33% average, 53% poor and 13% excellent.

- ✓ It shows in experimental group the mean post test knowledge score was 16.01 which were higher than the pre-test knowledge score of 8.08. The mean difference obtained was 7.93 and calculated' value (paired t- test) was 6.2 with df of 31 which was significant as 2.07.
- ✓ It shows in control group the mean post test knowledge score was 8.93 which were higher than the pre-test knowledge score of 8.03. The mean difference obtained was 0.9 Calculated 't' value (unpaired t-test) was with df of 61 which was significant as 2.10**.**
- ✓ In experimental group, shows that the association between pre-test knowledge with selected demographic variables that is age, gender, qualification, sources of information about oral hygiene, duration of brushing are non- significant and total time of brushing is significance. Hence H2 is accepted.
- ✓ In control group, the table indicates that the association between pre-test knowledge with selected demographic variables that is age, gender, qualification, total number of brushing, sources of information about oral hygiene, duration of brushing, religion, type of family are non-significance.
- ✓ There is no significant association between the oral hygiene of school children among the selected schools of control group with their selected Demographic Variables. Hence h2 in not accepted.

LEVELS OF KNOWLEDGE REGARDING ORAL HYGIENE OF SCHOOL CHILDREN IN BOTH THE EXPERIMENTAL GROUP AND CONTROL GROUP

(N1=150), (N2=150)

LEVEL OF KNOWLEDGE	RANGE	EXPERIMENTAL GROUP				CONTROL GROUP			
		PRE-TEST		POST-TEST		PRE-TEST		POST-TEST	
		F	%	F	%	F	%	F	%
EXCELLENT	16 & above	05	3	120	80	06	04	20	13
AVERAGE	11-15	40	27	25	17	30	20	50	33
POOR	Less than 10	105	70	05	03	114	76	80	53

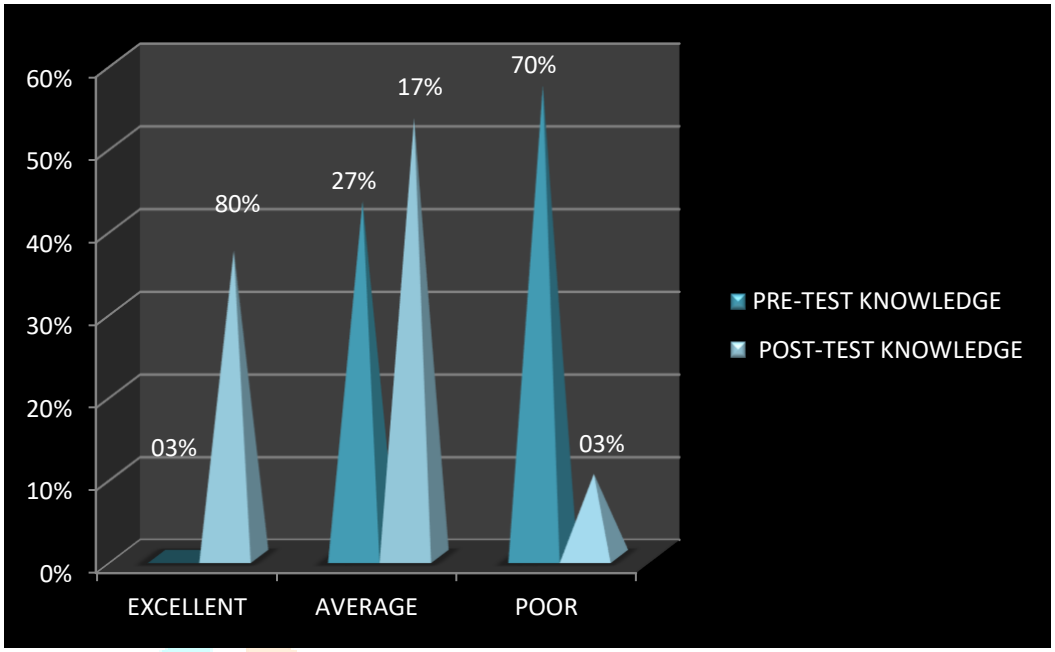

Fig No.1: Pyramid diagram showing differences between Pre-test and post-test knowledge score regarding Oral hygiene of school children in experimental group.

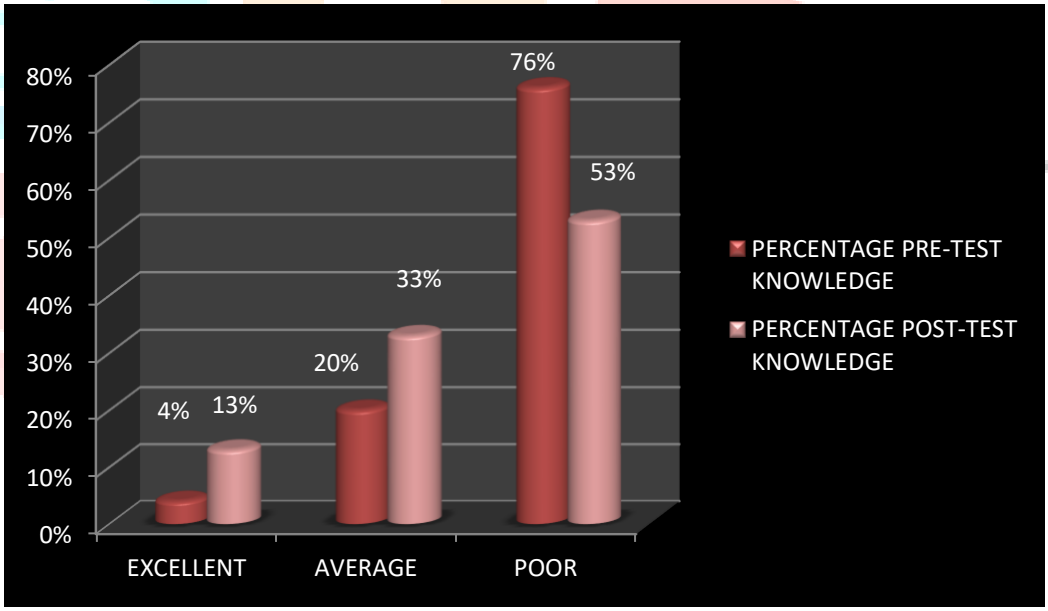

Fig No.2: Cylindrical diagram showing differences between pre-test and post-test knowledge score regarding oral hygiene of school children among teachers in control group.

EFFECTIVENESS OF SELF INSTRUCTIONAL MODULE REGARDING ORAL HYGIENE OF SCHOOL CHILDREN

(N1=150), (N2=150)

Group	Pre-test/ Post-test	Mean	Standard deviation	Mean difference	't' value	df
Experimental group	Pre-test	8.08	3.17	7.93	6.2	31
	Post-test	16.01	2.79			
Control group	Pre-test	8.03	4.14	0.9	34.02	61
	Post-test	8.93	4.45			

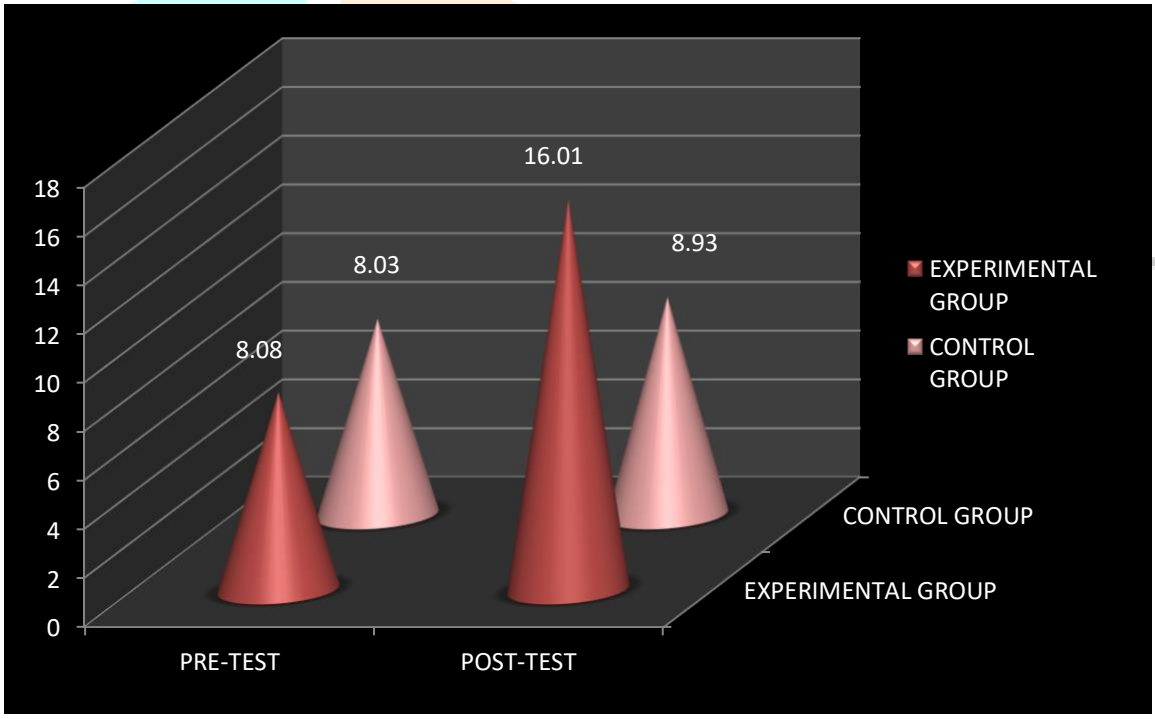

Fig No 3: Cone diagram showing total comparison between pre-test and post-test knowledge score regarding Oral hygiene of school children in experimental and control group

CONCLUSION: The true experimental study was done in selected school in Lucknow District.

The present study highlights the problem faced by school going children related to oral hygiene. The research project will help to enhance the level of knowledge of school children regarding oral hygiene and its related factors, management of dental problem in school going children.

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