

## Effectiveness of Structured Teaching Programme on Knowledge Regarding Treatment and Prevention of Scabies among the School Age Children in a Selected School, Bhubaneswar

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### Original Research Article

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**Abstract:** A pre- experimental research design was conducted on school students to assess the effectiveness of structured teaching programme on knowledge regarding treatment and prevention of scabies. An evaluative approach with one group pretest & posttest design was used for the study. 50 samples were selected through purposive sampling technique method by use of closed ended multiple choice questionnaire. The present study was conducted in KIIT Deemed University, Bhubaneswar, and Odisha. The Data were analyzed by using descriptive & inferential statistics. A significant difference between pretest & posttest knowledge was found ( $t=59, p\leq 0.05$ ). The study findings showed that the STP was effective in improving knowledge of KIIT students. There was no significant association between the level of knowledge & demographic variables.

**Keywords:** Effectiveness, Scabies, Structured teaching programme, Knowledge.

### INTRODUCTION

The word “Scabies” is derived from the Latin word “scab ere” meaning to scratch. *Sarcoptes scabiei* is derived from Greek word “sark”(flesh) and koptein (to smite or to cut) *Sarcoptes scabiei* or *Acarus scabiei* is an extremely small arthropod. It is just visible to the naked eye. Measuring 0.4mm in size. It is an ectoparasite of man, it lives and breeds in the human skin and causes a disease known as scabies. Scabies is a highly communicable skin disease caused by an arachnid, *Sarcoptes scabiei*, and the Itch mites. Diagnosed by Itching particularly at night, Papules, vesicles and pustules in preferred sites[1].

Globally as of 2009, it is estimated that 300 million cases of scabies occur each year, although various parties claim the figure is either over or underestimated. About 1 – 10% of the global population is estimated to be infected with scabies, but in certain populations, the infection rate may be as high as 50 – 80%. Human scabies has been reported for over 2,500yrs. Scabies has been reported to occur in epidemics in nursing homes, hospitals, long term care facilities, schools and other institutions. In the U.S, it is seen frequently in the homeless population but occurs episodically in other population of all low socio-economic groups as well [2].

According to the recent survey carried out in India, about 30,078 people were found suffering from scabies. On a global basis, about 300 million cases of scabies are reported annually. There could be several reasons for the occurrence of scabies; however these

mites majorly transfer from one human host to another. In order to prevent further re-infestations, it is imperative to educate yourself on the occurrence of the condition as well as the symptoms attached to it[3].

### NEED FOR STUDY

Today the term scabies refers to the skin lesions produced by *Sarcoptes scabiei* var *hominis*. A readily treatable infestation, scabies remains common primarily because of diagnostic difficulty, inadequate treatment of patients and their contacts, and improper environmental control measures.

Prevalence rates as high as 100% were reported in one Indian village. A study conducted in 2012 collected data from a pool of 30,078 children in India and reported that scabies was the third most common disease found in infants. Taking into consideration all the age groups of children tested, the

same study found that scabies was the second most common disease reported over all. Results one to two of infants for incidents rate of scabies in children in Karnataka [4].

A study was conducted on scabies infestation in 1998, the effect of intervention by public health education. The objective of this study was to determine the prevalence of scabies in an infected village to educate the residents on self-treatment and prevention by the use of 5% mono sulfiram soap. The results show that 85% cure rate obtained. The study contains 59 households containing 313 people [5].

It must be acknowledged that it will never be possible to complete eradicate the risk of scabies infection entering a school. So awareness of symptoms and early detection are key factor in limiting the impact of scabies infection.

Scabies has existed for at least 2500 years and currently affects 300 million people annually worldwide. Its listing as a neglected tropical disease by the World Health Organization (WHO) in 2013 recognized the neglect in public and private sector expenditure on this problem, the lack of attention at local, national, and international levels, and the higher incidence of this infection amongst the poor[6]. In Australia, it affects about 6 in 10 Aboriginal and Torres Strait Islander children at any given time, more than six times the rate seen in the rest of the developed world. The sequela of scabies predisposes affected children to sepsis and other non-supportive invasive infections (*e.g.* lymphadenopathy, acute post-streptococcal glomerulonephritis (APSGN) and rheumatic fever). Outbreaks of APSGN usually coincide with scabies outbreaks, which can contribute to the development of chronic kidney disease and subsequent renal failure in adulthood. It is usually reported in Australian Aboriginal communities, other Oceanic nations (Papua New Guinea, Fiji, Solomon Islands, Vanuatu), and in some parts of India, Chile and Trinidad, and is uncommon outside these communities. APSGN outbreaks do not always

coincide with scabies outbreaks elsewhere in the developed world. Scabies infestation has a negative impact on the quality of life for infected individuals (similar to that of psoriasis) resulting in substantial stigmatization and ostracism. In this manuscript we focus on the challenges found with diagnosis and treatment, emerging resistance among scabies mites, and the need for further research in this field to identify new and alternative therapies for the treatment and prophylaxis of scabies [7].

#### **STATEMENT OF THE PROBLEM**

A Study to assess the effectiveness of structured teaching programme on treatment and prevention of scabies among the school age children in KISS Deemed to be University, Bhubaneswar.

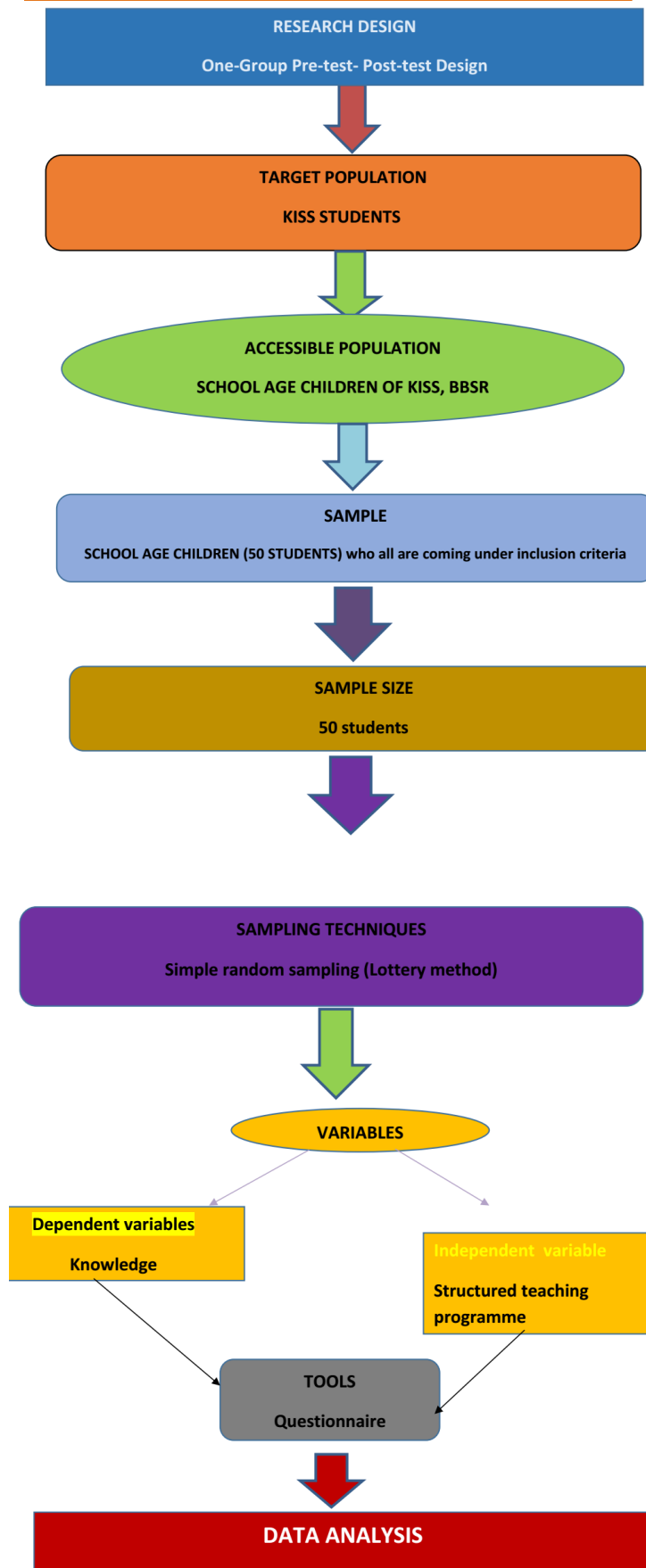
#### **OBJECTIVES OF THE STUDY**

- To assess the knowledge regarding treatment and prevention of scabies among school age Children.
- To evaluate the effectiveness of structured teaching programme regarding treatment and prevention of scabies among school age children.
- To determine association between the knowledge regarding prevention of scabies among school age children with selected demographic variables.

#### **MATERIALS & METHODS**

The research design used for this study was pre-experimental in nature. The study was conducted at KISS students' class room, KISS to be Deemed University Bhubaneswar, Odisha. The sample included 50 students on the basis of inclusion & exclusion criteria were selected. Simple random sampling technique was used for this study. The tool consists of 2 sections. Sect-1 consisting of (Socio-demographic variables such as age, gender, religion). Section II (consisting items of knowledge related to treatment and prevention of scabies. The content validity of structured questionnaire was ensured by submitting the tool to the expert in the field of pediatrics for content validation.

**SCHEMATIC DIAGRAM OF RESEARCH DESIGN**

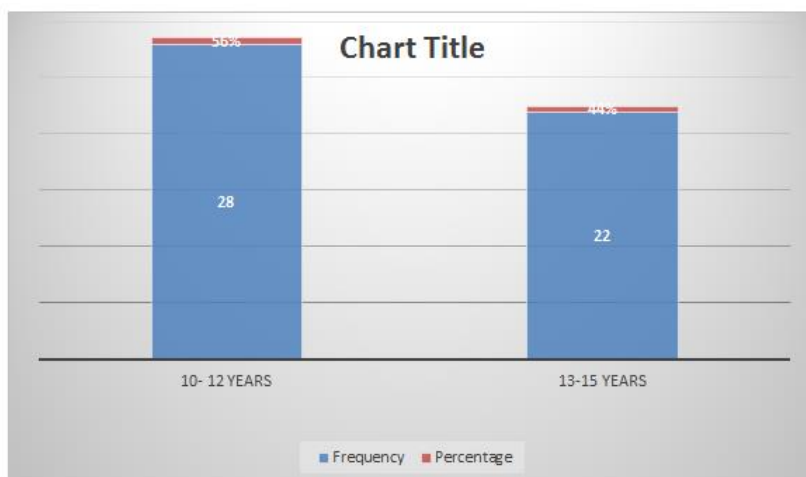


**RESULTS & FINDINGS**

**Table-1: Frequency & percentage distribution of KISS students according to their demographic variable**

Age of the students	FREQUENCY	PERCENTAGE
10-12 years	28	56%
12-14 years	22	44%

**Age of the student**



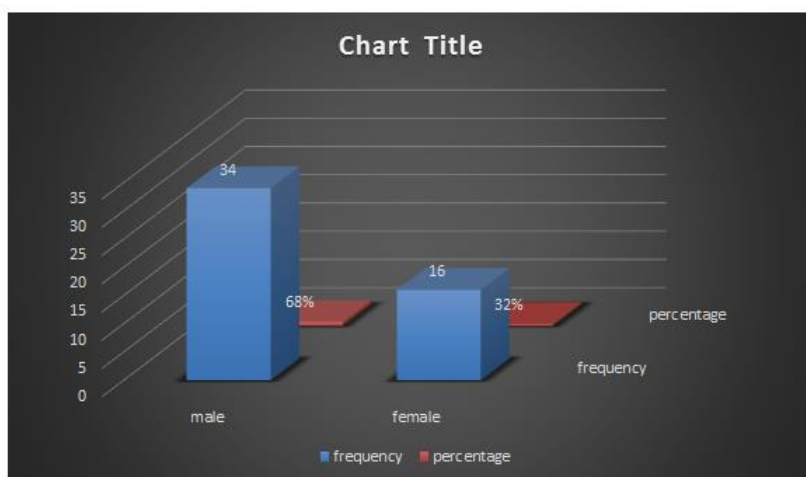
**Fig-1: Bar diagram showing the distribution of sample to their age in year**

Data presented in the Table-1 and Figure-1 shows 28 students were in the age group of 10-12 years and 22 students were in the age group of 13-15 years.

Data in Table-2 and Figure-2 shows that nearly 68% (almost 70%) were male and 32% were female.

**Table-2**

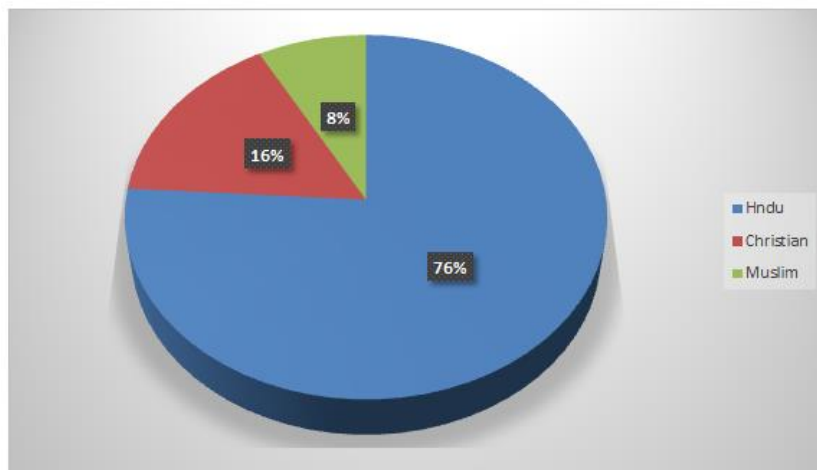
Sex	frequency	Percentage
Male	34	68%
Female	16	32%



**Fig-2: Above chart showing the distribution of samples according to their gender**

**Table-3**

Religion	frequency	Percentage
Hindu	38	76%
Christian	8	16%
Muslim	4	8%



**Fig-3: Pie diagram showing the distribution of sample according to their religion**

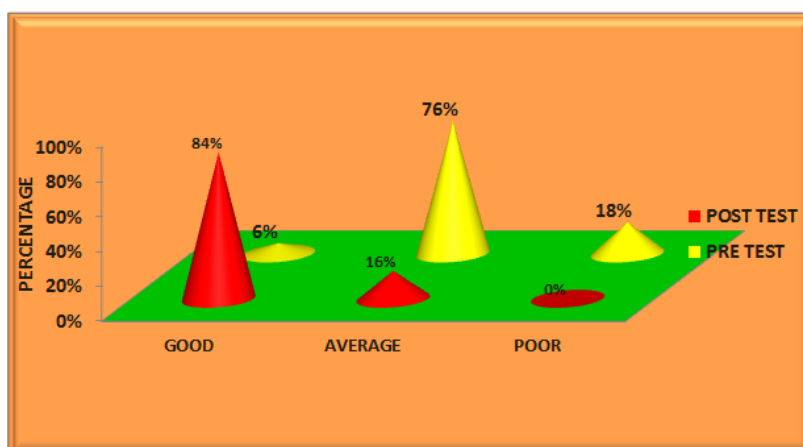
Table-3 and Figure-3 shows that 76% are Hindu, 16% were Christian and 8% were Muslim.

students that 6% were good, 76% were average and 18% were poor, whereas post-test knowledge 84% were good, 16% were average and 0% were poor.

Data presented in the Table-4 and Figure-4 indicates pre-test and posttest knowledge score of the

**Table-4: Pretest and post test**

PRE-TEST	GOOD	AVERAGE	POOR
FREQUENCY	3	38	9
PERCENTAGE	6	76	18
POST-TEST	GOOD	AVERAGE	POOR
FREQUENCY	42	8	0
PERCENTAGE	84	16	0



**Fig-4: Cone diagram showing the pre-test and post test knowledge score of subject**

**Table-5: Comparison of Pretest and Posttest knowledge score of students regarding scabies**

Test	N (SAMPLE NUMBER)	Mean	S.D	Difference of pre and post mean	Difference of pre and post S.D
Pre-test	50	15.82	2.37		
Post-test	50	21.1	1.62	5.28	0.75

The above table-5 shows that the comparison of pretest and posttest mean is 5.28 and comparison of

pretest-posttest S.D. is 0.75 among the school age children.

**Table-6: Range, Mean, SD & Mean percentage on level of knowledge regarding scabies of school age children in pretest and posttest**

Sl. No	Items	Maximum score	Range	Mean	Sd	Mean score%
Pre test	Over all	25	21-11	15.82	2.37	31.64%
post test	Over all	25	24-18	21.1	1.62	42.2%

The above table shows that the range, mean, SD & mean percentage on level of knowledge regarding scabies of school age children in posttest is higher than the pretest

**IMPLICATION OF THE STUDY**

The nursing profession exists in response to a need of society and holds idea related to man’s health throughout his lifespan. Nurses direct their energies towards the promotion, maintenance and restoration of health, prevention of illness, to alleviate suffering and the assurance of peaceful death when life can no longer be sustained. The study findings have thrown new light on the implications of the future of profession in relation to nursing education, nursing practice and nursing research.

**RECOMMENDATIONS**

Basing on the study, the investigator proposes the following recommendations for future research:

- The study can be replicated on large sample in different setting to have a wider generalization of findings.
- A similar study can be conducted among staff nurses or other paramedical staff.
- A study can be conducted using other strategies, information booklet, manual etc.
- The researcher felt a deep sense of satisfaction and fulfillment for having undertaken

**CONCLUSION**

The present study showed that the knowledge among the school age children regarding treatment and prevention of scabies in them of mean % was 10.56%. The comparison of pre-test and post-test regarding treatment and prevention of scabies shows that students had gained some knowledge after administrating structured teaching programmer on treatment and prevention of scabies with mean 42.2% of post-test.

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