

“ASSESS THE EFFECTIVENESS OF PLANNED TEACHING ON KNOWLEDGE REGARDING PREVENTION AND MANAGEMENT OF SCABIES AMONG PRIMARY SCHOOL TEACHERS IN A SELECTED SCHOOL”

Ms.Rajani Hansaraj Dhabarde¹, Ms.Madhuri Shambharkar ², Ms Pratibha Wankhede³, Ms Achita Sawarkar⁴ , Ms Deeplata Mendhe ⁵

¹. “Department of Community Health Nursing, Smt. Radhikabai Meghe” Memorial College of Nursing, Sawangi(meghe) Email ID – rajanidhabarde86@rediffmail.com

². “Assistant Professor, Department of Community Health Nursing, Smt”. “Radhikabai Meghe Memorial College of Nursing, Sawangi(meghe)” Email Id- mnnai91@gmail.com

³. Associate Professor Department of Community Health Nursing, Smt. Radhikabai Meghe Memorial College of Nursing, Sawangi(meghe) Email Id- pratibha wankhede22@gmail.com

⁴. “Assistant Professor, Department of Community Health Nursing, Smt. Radhikabai Meghe” Memorial College of Nursing, Sawangi(meghe) Email Id – achitasawarkar5@gmail.com

⁵. “Department of Community Health Nursing, Smt. Radhikabai Meghe Memorial” College of Nursing, Sawangi(meghe) Email ID- mendhedeplata@gmail.com

***Corresponding author:** Ms Rajani Dhabarde

***Email ID-**rajanidhabarde86@rediffmail.com

Abstract

Background: The Latin term "scab ere," which means to scratch, is the source of the English word "scabies." The name *Sarcoptes scabiei* comes from the Greek words "sark" (to smite or to cut) An exceedingly tiny arthropod is known as *Sarcoptes scabiei* or *Acarus scabiei*. The bare eye can hardly make it out. Sized at 0.4 millimetres. It is an ectoparasite of humans, where it breeds and lives while spreading the scabies disease. The arachnid *Sarcoptes scabiei* and the Itch mites are responsible for the highly contagious skin condition known as scabies. Itching that is worse at night, papules, vesicles, and pustules in the preferred site are used to diagnose

Objectives:

1) To evaluate the pre-test knowledge level in regards to preventing and managing scabies amid the primary school teachers.

2) To evaluate the effectiveness of teaching that is planned in regards to preventing and managing scabies amid the school teachers of the chosen primary school.

3) To identify the post-test knowledge level in regards to preventing and managing scabies amid the primary school teachers with the chosen demographic variables.

Methods and Materials: - In this study, a **quantitative research** style was employed. The sample size for this **quantitative research is 43**. The research will be carried out at a primary school in a rural community.

Result: Primary school instructors from a selected school are being studied in this study. As the five per cent level of significance, this is much less than the calculated 'F' value of 5.36. In addition, the resulting 'p'=0.003 was significantly lower than the acceptable, Importantly 'p'=0.05. It is stated that primary school teachers' age is connected to their after-the-test knowledge score.

Conclusion: The current pre-experimental study aided in determining. The success of organised training on scabies prevention and treatment knowledge between primary school teachers in a chosen school. The study's findings also shed light on evolving standards regarding scabies awareness among elementary school teachers.

Keywords: knowledge, prevention and management, scabies, primary school, teachers, effectiveness

Introduction

The Latin term "scab ere," which means to scratch, is the source of the English word "scabies." The name *Sarcoptes scabiei* comes from the Greek words "sark" (flesh) and "koptein" (to smite or to cut). An exceedingly tiny arthropod is known as *Sarcoptes scabiei* or *Acarus scabiei*. The bare eye can hardly make it out. Sized at 0.4 millimetres. It is an ectoparasite of humans, where it breeds and lives while spreading the scabies disease. The arachnid *Sarcoptes scabiei* and the Itch mites are responsible for the highly contagious skin condition known as scabies. Itching that is worse at night, papules, vesicles, and pustules in the preferred site are used to diagnose.¹ The risk of contracting scabies increases for those who come into close physical contact with infected people, especially young children, nursing home residents who are elderly, moms of young children, and young adults who are sexually active. Scabies affect all communities, but because poor people lack personal cleanliness, are malnourished, and live in close quarters, it spreads quickly among them. Scabies is primarily transmitted from people to another person by touching their skin directly as well as surfaces, furniture, bedding, clothing, and other things.²

Scabies is believed to impact At any given time, At any given time, there are more than two hundred million individuals on the planet. In India, in the two rural and urban areas, the prevalence ranges from 13% to 59%. The research on scabies prevalence ranges from 0.2% to 71% on a global scale. ³*Sarcoptes scabiei* is the parasite that causes scabies, a skin ailment.⁴ A hypersensitive response to scabies mites results in nodular scabies. It typically manifests as persistently itchy nodules in the axilla, genitalia, and scrotum.⁵

Clinical signs of scabies include mite tunnels in the external surface of the body, nocturnal pruritus, under a microscope when the availability of mites are examined, and congested environments. Scabies manifestations are generally of three different types: classic (rashes on the skin with vesicles, papules, pustules, nodules, and excoriation on the axillae, elbows's extensor, flexor the wrists's flexor area, interdigital space, genital genitalia area, periumbilical, periaureolar), crusted (hyperkeratotic) crust on skins (psoriasisiform dermatitis). It is a condition that causes additional bacterial infections (impetigo), which can lead to serious illnesses such as rheumatoid arthritis, glomerulonephritis, and sepsis. Other symptoms of impetigo include impaired ability to concentrate, sleep pain, social stigma, and itchiness.⁶

Various techniques have been developed to treat scabies in high-risk groups, including mass medication therapy, education, and informational dissemination (2015). A 12-month course of permethrin, ivermectin, or the conventional treatment, respectively, significantly lowers the prevalence of scabies by 94, 62, and 49 per cent (p-value)⁵

Methods

The questionnaire was created to collect the data. The supervisor then looked over the questionnaire. The Institutional Review Board granted the permission. The researchers then went to the research population and requested participation in the study from a primary school teacher in the urban and rural community areas. The participants were given a questionnaire along with the consent form, which they completed. Questionnaires were collected, and data was evaluated. If each question was answered correctly (correct=1, incorrect=0), the maximum total mark was 20. If the score was greater than 17, the respondent's level of knowledge was rated good and poor if 14 or below. Inclusion criteria were those Primary school teachers selected in rural areas who were willing to participate in this research as participants and were teachers in primary schools. They were accessible throughout the data collection period which were the exclusion criteria where Primary school instructors were unwilling to participate in the research, and primary school teachers were unable to collect data. 43 is the sample size. Purposive sampling is a sampling technique. Data Analysis: Response spread based on demographic variables and knowledge scores, as well as respondent spread based on the association between knowledge scores and demographic data. It is a piece of equipment or an instrument used to collect information. The investigator at the end of upgrading his theoretical knowledge of scabies prevention and administration literature developed the instrument. The investigation's personal experience, theoretical understanding, and professional guidance. The creation of the study's tool was supported by an overview of the available research. the following tool is developed for the study questionnaire. .questionnaire is totally equipment, the subjects are asked to respond to the same questions in the same order and they are given some set-off option for the responses. The right answers were awarded one point, while responses were awarded a 'zero' point. The college's ethical committee approved the study proposal's ethical aspects. The participants are given information about the study.

Result

The data collected include the demographic variable age of, primary school teacher education, occupation, marital status, years of experience, and area of residence (Table. 1)

“Demographic Variables”	“Number of primary school teachers”	“Percentage(%)”
“Age”		
25-30 years	10	23.3
31-35 years	18	41.9
36-40 years	6	14.0
≥41 years	9	20.9
“Sex”		
Male	10	23.3
Female	33	76.7
“Educational Qualification”		

Bed	17	39.5
Med	9	20.9
MA	9	20.9
MSc	8	18.6
Marital Status		
Unmarried	16	37.2
Married	27	62.8
Years of experience		
less than 5 years	12	27.9
6-10 years	21	48.8
11-15 years	7	16.3
≥16 years	3	7.0
Area of residence		
Rural Area	43	100
Urban Area	0	0

Result 2 about table format

Table 2: “Importance of the difference between knowledge score in pre and post-test of Primary School Teachers”

Test	Mean	SD	Mean Difference	t-value	p-value
Pre Test	8.62	2.27	9.11±2.56	23.30	0.0001 S,p<0.05
Post Test	17.74	1.36			

Graph 3: “Significance of difference between knowledge score in pre and post-test of Primary School Teachers”

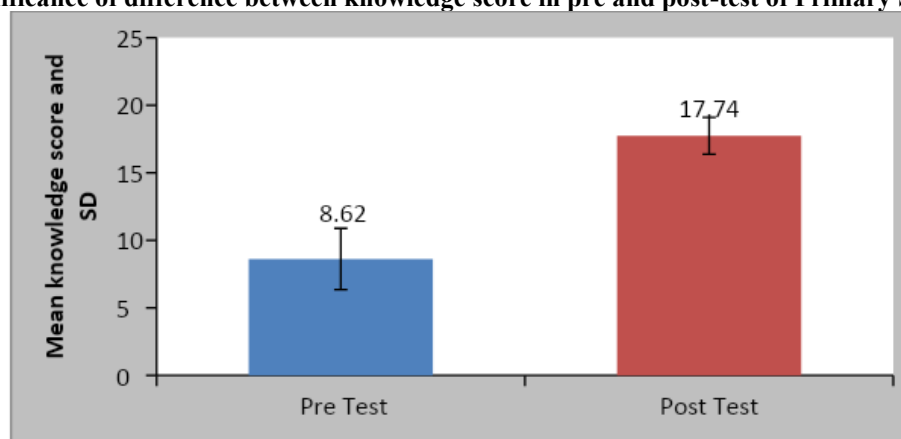


Table 4: “Associative factors of post-test understanding scores regarding Prevention and Management of scabies about age in years.”

“Age (yrs)”	“No. of primary school teachers”	“Mean posttest knowledge score”	F-value	p-value
25-30 yrs	10	16.50±1.26	5.36	0.003 S,p<0.05
31-35 yrs	18	17.88±1.45		
36-40 yrs	6	18.16±0.75		
≥41 yrs	9	18.55±0.52		

The following table demonstrates the link between selected elementary school teachers' knowledge scores and age in years. At the five per cent level of significance, this is too low for the calculated 'F' value of 5.36. Furthermore, the computed 'p'=0.003 had been significantly below the allowable significance level, 'p'=0.05. Therefore, it can be said that a primary school teacher's age group that is stated in years is related statistically to their post-test knowledge score.

Table 5: “Association of post-test knowledge scores regarding Prevention and Management of scabies about gender.”

Gender	No. of primary school teachers	Mean posttest knowledge score	t-value	p-value
Male	10	17.30±1.63	1.18	0.24 NS,p>0.05
Female	33	17.87±1.27		

The following table displays the collected data of the relationship between gender and knowledge of chosen elementary school teachers. This is significantly greater than a calculated 't' value of 1.18. The calculated 'p'=0.24 is effectively

greater and more than the significance level, 'p'=0.05. The gender of primary school teachers is found to be statistically irrelevant to their knowledge score following the test.

Table 6: “Relationship between after the test knowledge score on scabies prevention and management and education.”

“Educational Level”	“No. of primary school teachers”	“Mean posttest knowledge score”	F-value	p-value
Bed	17	17.94±1.39	3.22	0.033 S,p<0.05
Med	9	16.66±1.32		
MA	9	18.44±1.23		
MSc	8	17.75±0.88		

As a five per cent level of significance, the 'F' values that have been arranged were 2.84(df=3,39), that is lesser than the computed 'F,' which was 3.22. The calculated 'p'=0.033 was lesser than the granted level of significance, 'p'=0.05. Therefore, it can be said that primary school teachers' “level of education” is connected statistically to their knowledge scores following the test.

Table 7: “Relationship between marital status and post-test knowledge score on scabies prevention and management.”

“Marital Status”	“No. of primary school teachers”	“Mean posttest knowledge score”	“t-value”	“p-value”
Unmarried	16	17.62±1.36	0.43	0.66 NS,p>0.05
Married	27	17.81±1.38		

The following chart demonstrates the association between knowledge score and marital status of selected primary school teachers. A tabulated 't' value was 2.01 (df=41), This was significantly greater than the calculated 't' value of 0.43 at the 5% amount of significance. The calculated 'p'=0.66 was considerably bigger than the allowable amount of significance, 'p'=0.05. In conclusion it can be stated that primary school teachers' marital status was statistically unrelated to their post-knowledge score.

Table 8: “Association of post-test knowledge scores regarding and Management of scabies in relation to years of experience”

“Years of experience”	“No. of primary school teachers”	“Mean posttest knowledge score”	“F-value”	“p-value”
Below 5 years	12	18.25±1.60	3.50	0.024 S,p<0.05
6-10 years	21	17.38±1.07		
11-15 years	7	18.57±0.53		
≥16 years	3	16.33±2.08		

The following table demonstrates the association between selected elementary school teachers' knowledge scores and years of experience. This was less calculated 'F,' which was 3.50 at 5% significance, a computed 'p'=0.024 was less than the 0.05 significance level. As a result of this, it is stated that the years of experience of primary school instructors are associated statistically with their score of after-the-test knowledge.

Discussion :

8.62 2.27 was the score of knowledge in the pretest. In the post-test, the evaluated score of knowledge was 17.74 + 1.36. Primary school teachers with respect to the management and prevention of scabies between the pretest and posttest. At the 5%-level of significance, defines the mean difference values, and the standard deviations are being contrasted using the paired 't' test of the student's. n = 43-1, or 42 degrees of freedom, produced a tabulated value of 2.01. Statistically, the significance level is approx on the level of 5%, and the projected 't' value, or 23.30, is most importantly higher than the tabulated value for the primary school teachers' overall knowledge score. The intended education programme was successful in improving primary school teachers' knowledge of scabies prevention and management, it can be concluded statistically.

The findings have a relation with the scores of knowledge in regards to the management and prevention of scabies in teachers of the primary school. The level of association in the post-exam knowledge score related to the prevention and management of scabies amid the primary school and its teachers. In the selected schools, the demographic variables consist of age, sex, educational qualification, marital status, years of experience, and home location.

Conclusion

The present pre-experimental study has helped a selected school, Assess the impact of planned education on primary school teachers' knowledge of scabies prevention and management. The study's findings also shed light on evolving standards regarding scabies awareness among elementary school teachers. The outcome of the report defines that most of

the teachers had very good expertise in the prevention and management of scabies. This research will assist students in improving their knowledge and skills in the prevention and management of scabies

References

1. Sahoo P, Das N. Effectiveness of Structured teaching programme on knowledge regarding treatment and prevention of scabies among the school age children in a selected school Bhubaneswar. 2018 Apr 4;
2. Bhat S, Akhter MA, Bano MZ. INTERNATIONAL JOURNAL OF APPLIED SCIENCE AND RESEARCH. 2020;6.
3. Misganaw B, Nigatu SG, Gebrie GN, Kibret AA. Prevalence and determinants of scabies among school-age children in Central Armachiho district, Northwest, Ethiopia. PLOS ONE. 2022 Jun 14;17(6):e0269918.
4. Korte LM, Bowen AC, Draper ADK, Davis K, Steel A, Teodora I, et al. Scabies and impetigo in Timor-Leste: A school screening study in two districts. PLoS Negl Trop Dis. 2018 May 31;12(5):e0006400.
5. Alharthi AS, Alsofyani MA, Alharthi WK, Alsalmi SA, Altalhi AS, Alswat KA. <p>Assessment of Knowledge and Fear of Scabies in a Saudi Population</p>. J Multidiscip Healthc. 2021 Jun 8;14:1361–71.
6. Widaty S, Linuwih S, Rihatmadja R, Miranda E, Marissa M, Kekalih A, et al. INVOLVEMENT OF NON-MEDICAL PERSONNEL IN MANAGEMENT OF SCABIES AT A BOARDING SCHOOL IN INDONESIA. Southeast Asian J Trop Med Public Health. 2021 Sep 9;52:527–37.
7. Reta MW, Dershe BT, Sahilu BY. Determinants of Scabies among Primary School Children in Habru District: a Case-Control Study [Internet]. In Review; 2020 Jan [cited 2022 Jun 23]. Available from: <https://www.researchsquare.com/article/rs-11271/v1>
8. SID.ir | Scabies Among High School Students In Accra, Ghana: Risk Factors And Health Literacy [Internet]. [cited 2022 Jun 29]. Available from: <https://www.sid.ir/en/journal/ViewPaper.aspx?ID=773022>
9. Alharthi AS, Alsofyani MA, Alharthi WK, Alsalmi SA, Altalhi AS, Alswat KA. Assessment of Knowledge and Fear of Scabies in a Saudi Population. J Multidiscip Healthc. 2021 Jun 8;14:1361–71.
10. Jacob M. Are Anganwadi Teachers the Ultimate Health Guides for Under-Five. Int J Adv Nurs Manag. 2016;4(4):375.
11. Scabies and the development of clean and healthy living behavior tools for Islamic boarding schools (pesantren) [Internet]. Medical Technology and Environmental Health. CRC Press; 2020 [cited 2022 Jun 25]. Available from: <https://www.taylorfrancis.com/chapters/edit/10.1201/9781003016700-26/scabies-development-clean-healthy-living-behavior-tools-islamic-boarding-schools-pesantren-triyani-hendryanny-indriyanti-purbaningsih-respati>
12. Sanei-Dehkordi A, Soleimani-Ahmadi M, Zare M, Jaberhashemi SA. Risk factors associated with scabies infestation among primary schoolchildren in a low socio-economic area in southeast of Iran. BMC Pediatr. 2021 May 25;21:249.
13. Cox V, Fuller LC, Engelman D, Steer A, Hay RJ. Estimating the global burden of scabies: what else do we need? Br J Dermatol. 2021 Feb;184(2):237–42.
14. Sahoo P, Das N. Effectiveness of Structured teaching programme on knowledge regarding treatment and prevention of scabies among the school age children in a selected school Bhubaneswar. 2018 Apr 4;
15. Sindayo T, Molla T, Assefa A, Tilahun B, Haven H. Prevalence of Scabies and Associated Factors among Primary School Children in Raya Alamata District, Tigray, Ethiopia, 2017/2018. J Infect Dis Epidemiol [Internet]. 2020 Sep 3 [cited 2022 Jun 25];6(5). Available from: <https://www.clinmedjournals.org/articles/jide/journal-of-infectious-diseases-and-epidemiology-jide-6-154.php?jid=jide>
16. Talukder K, Talukder MQK, Farooque MG, Khairul M, Sharmin F, Jerin I, et al. Controlling scabies in madrasahs (Islamic religious schools) in Bangladesh. Public Health. 2013 Jan 1;127(1):83–91.