

Effectiveness of VATP on Prevention of Pediculosis through the Use of Natural Remedies among Mothers of School-Age Children

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ABSTRACT

Background: The child is the stylish creation among God's brutes. The most precious gift is a healthy child. The children of the moment will shape the India of hereafter. Head lice infestation is an ongoing global health issue, particularly among academy-age children. An ongoing issue with public health on a global scale, particularly with the academy- age children.

Methods: Total 60 maters are included as the sample. An accessible slice system was used. A structured knowledge questionnaire was used to gather information, and Chi-square analysis was used to uncover the relationship between knowledge about pediculosis forestallment through the use of natural remedies with socio-demographic factors.

Results: The post-test score was more advanced than the pre-test knowledge score, at 71.63. Using natural curatives, the VATP was helpful in precluding Pediculosis to the tune of 33.47 Of the overall score. The reckoned knowledge t-value (15.84) was significantly advanced than the table value for the degree of freedom 59 and 0.05% position of significance (1.96). The videotape-supported tutoring approach was successful as a result.

Conclusion: After evaluation of knowledge on Pediculosis, it was established that utmost maters had average knowledge regarding pediculosis forestallment through natural remedies. As a result, exploration has shown that VATP was relatively helpful in raising awareness of natural remedies.

Key-words: Effectiveness, Knowledge, Maters of academy-going children, Natural remedies, Pediculosis

INTRODUCTION

Pediculosis is one of the major parasitic infections that affects children. It is a ubiquitous parasitic skin complaint of the hair on the head. Human capitis causes it, it leads to itching of the crown due to live lice present in the hair or lice eggs fixed to hair shafts. Direct contact with sick people, their apparel, or particular effects results in transmission.^[1]

Pediculosis is transmitted through combs, skirmishes, apkins, hair accessories, headdresses, caps, capelet, jacket, and effects worn on the hair at home and on playgrounds, at the academy, and in all other settings, where children interact freely. Pointers of a lice infestation include itching, flakes of skin that act as dandruff stuck in the hair, and the commotion of an acarid crawling on the crown.^[2]

According to an 11-time study by the Israel Defence Forces, head lice infestations were loftiest on the morning of each academy time, in the warmer and summer months. The number of children who missed a normal of four to five days of academy due to habitual infestation with head lice was more advanced than the

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number of children in whom parents did not describe lice.^[3]

Pediculosis is parasitic and seeks out the mortal organism as a host. Infestation with head lice is called pediculosis capitis. The louse is a blood-sucking organism that requires about five reflections per day. It is generally set up on the crown behind the cognizance and near the décolleté at the base of the crown. It is a worldwide problem that occurs in both developed and developing countries.^[4]

Head lice do in people of all periods but are most common in children between 6 and 12 because they partake in their things more frequently and play nearly together. Girls are double as likely to be overrun as boys. It is an oppressively itchy infestation of lice set up in the hair of the head. The inflexibility of Pediculosis is manifested by crown itching, sleep disturbances, mild fever, conjunctivitis, alopecia, bacterial infections, blisters, impetigo, pocks, and blowup of the neck gland^[5].

To control Pediculosis with natural effective home remedies (ginger, neem oil painting, olive oil painting, anise oil painting, tea tree oil, and melted adulation) to treat head lice infestation, the result shows that utmost home remedies hardly kill the eggs despite prolonged exposure to water, indicating that killing the lice by privation of oxygen is inadequate.^[6]

Several home cures promise to treat head lice. Still, there needs to be more scientific evidence to support their efficacy and safety. Numerous treatments have yielded thorough issues. They concur that a person might borrow a non-medical system to lessen the spread of lice and stop them from returning after using home lice cures.^[7]

The neem factory is among the most adaptable and practical shops in actuality. Natural goods have been used as traditional remedies thousands of times, and interest in them has recently grown due to their generally cheaper cost and perceived lower toxin by the general public.^[8]

MATERIALS AND METHODS

Study design- A pre-experimental design was chosen for the present study, i.e. a group with pretest and post-test. 60 maters from Gaddanakeri vill in Bagalkot were included in the sample. The area was aimlessly named and the sample for the study was aimlessly named.

Setting of the study- The exploration was conducted in named Gaddanakeri areas of Bagalkot. It is nearly 15km from the Sajjalashree Institute of Nursing Science Bagalkot and was named grounded on the vacuity of maters of academy-going children.

Participants- The sample consists of 60 maters of academy-going children abiding in Gaddanakeri Bagalkot.

Sampling technique- The area (vill) was aimlessly named, and the samples for the study were aimlessly drawn. Total 60 maters of academy-going children were included in the sample.

Description of the data collection instrument

The instrument for the present study consists of 2 sections:

Section I- Socio-demographic Performa

Section II- Structured questionnaire to assess the knowledge regarding pediculosis forestalment through natural remedies- In 28 particulars, each item was followed with 4 options. The '1' mark was given for opting for the correct option, and the '0' mark was given for opting for the wrong option.

Statistical Analysis- Information was examined statistically using SPSS 18. Data were first entered into a Microsoft Excel spreadsheet and moved to SPSS. Descriptive and deducible analysis was used to organize and interpret the data to determine the relationship between the variables.

Ethical Consideration- An instrument of ethical authorization was attained from the institution's ethical committee.

RESULTS

Percentage-wise distribution of women according to their age group reveals that most maters (45%) belong to the age group of 20-25 years. 40% of mater had primary. 40% of maters are employees. 43% of maters had an income 10000-15000. 80% of women belong to the nuclear family. 100% of women belong to nuclear family (Table 1).



Table 1: Percentage-wise majority of the distribution according to sample characteristics

Sample characteristics	Scores	Category	Subjects	
			Frequency	Percentage
Age of mother	1	20-25 year	27	45
	2	25-30 year	18	30
	3	30-35 year	12	20
	4	Above 35	3	5
Education of mother	1	Primary	24	40
	2	Secondary	18	30
	3	Graduate	6	10
	4	Illiterate	12	20
Occupation of mother	1	Coolie	18	30
	2	Government	6	10
	3	Employee	24	40
	4	Housewife	12	20
Family income	1	Business	26	43
	2	10000-15000	24	40
	3	15000-20000	10	17
Type of religion	1	20000 above	48	80
	2	Hindu	12	20
Type of Family	1	Muslim	36	60
	2	Nuclear	24	40
Area of residence	1	Joint	60	100
	2	Rural	-	0
Number of children	1	Urban	12	20
	2	Only one	27	45
	3	Two	21	35
		More than two		

In the retest, of the 60 maters of the academy children, utmost (35) had poor knowledge, followed by (17) with good knowledge, (5) with veritably poor knowledge, (3) with veritably good knowledge, and (0) with excellent knowledge regarding the forestallment of Pediculosis through the use of natural remedies (Table 2). Still, after

the VATP (posttest) was given, 51.6 of maters had veritably good knowledge, followed by 23.3 of maters with good knowledge, 21.6 of maters with excellent knowledge, the smallest chance being 3.3 and 0 having veritably poor knowledge regarding the use of natural remedies to help Pediculosis (Table 2).

Table 2: Chance-wise distribution of study maters of academy-going children according to the position of knowledge in retest and post-test

Position of knowledge	Pre-test		Post-test	
	Number of replies chance	Percentage	Number of replies chance	Percentage (%)
Excellent	0	0	13	21.8
Veritably good	3	5	31	51.6
Good	17	28.3	14	23.3
Poor	35	58.3	2	3.3
Veritably poor	5	8.4	0	0
Total	60	100	60	100



Given that the calculated 't'-value (15.84) for the hypothesis is much advanced than the t value (1.96) from table: H1: Mothers pre-test and post-test knowledge scores on pediculosis forestalment using

natural curatives change significantly. Results revealed a significant difference in knowledge situations between the pre-test and post-test, indicating that the videotape instruction programme was effective (Table 3).

Table 3: Significant difference between the pre-test knowledge and post-test knowledge scores of maters

Test	Mean	Mean Diff.	SD Diff	Paired 't-test value	Table value
Pre-test (O ₂)	11.41				
		9.04	0.74	15.84	1.96
Post-test (O ₂)	20.45				

According to the findings, there was no relationship between maters post-test knowledge scores and their age, education, occupation, family income, type of

family, religion, place of residence, number of children (Table 4).

Table 4: Association between post-test knoweldge scores and named socio-demographic variables

Exploration variable	DF	Chi-square value	Table value	position of significance	Association
Parents Age	1	0.59	3.84	0.05	NS
Education of mother	1	0.66	3.84	0.05	NS
Religion of parents	1	0.54	3.84	0.05	NS
Type of family	1	0.04	3.84	0.05	NS
Family monthly income	1	0.80	3.84	0.05	NS
Occupation of mother	1	0.86	3.84	0.05	NS
Area of residence	1	0.86	3.84	0.05	NS
Number of children	1	0.80	3.84	0.05	NS

p<0.05 Two-tailed; NS-Not significant; DF- Degree of freedom

DISCUSSION

The study's main conclusions are discussed in this article, along with how they compare to those of previous studies. The current study aimed to assess the effectiveness of a video-assisted education programme for moms of school-aged children who want to avoid Pediculosis using home treatments. To achieve the objectives of the current inquiry, a pre-experimental one-group pre-test post-test without control group proposal with a quantitative evaluative technique was adopted. The sample was selected using a practical sampling method. The 60 moms; information was collected both before and after the VATP administration. In the current study, 40% of parents had primary education, 80% of participants were from nuclear families, and 45% of the moms were between the ages of 20 and 25.40% of the participants had no formal education, 40% were housewives, and most of the

mothers of the study's school-age children had a monthly family income of between Rs. 10,000 and 15,000.

Out of 55 investigations that Norman G did to establish the prevalence of head lice infection over the world, 29 of them were focused on school-aged children. In Asia, headlice incidence rates ranged from 0.7% to 59%, whereas in Europe, it was more common in girls and women. In contrast to the Americas, which varied from 3.6% to 61.4%, the prevalence ranged from 0.1% to 58.9%.^[9]

The expertise and practises of paediatricians in preventing and treating head lice were the subject of a second study by Fancelli *et al.* ^[11]. The study's findings showed that family paediatrician's clinical practises for treating head lice were investigated worldwide. ^[10]

Another study investigated the effectiveness of natural remedy like neem oil as a pediculicide. The natural treatment was successful in 60 children (92.2%). The

study found that using a natural cure to treat a lice infestation was very successful.

936 people participated in a structured training session in a Goa semi-urban community. The results showed that 13.1% of children under 4 years old, 55% aged 5 to 14, and 17.3% of adults aged 25 to 39 were infested.^[12]

This study investigated the prevalence of head lice. The sample included 300 children who attended consultation over 2 months. In this 6-to-8-year-old age group, the infestation was 30%, and in the 10-year-old age group, the infestation was 16%. These results indicate a high-head lice infestation, especially in early school.^[13]

In vivo, the pediculicidal efficacy of a home cure was the subject of one investigation. Over three weeks, the youngsters with the infestation received two applications of the coconut oil-based home cure on their hair. Each session lasted thirty minutes. The natural treatment did not have any negative side effects and successfully reduced the lice infestation.^[14]

The corresponding research investigation was carried out using relevant samples to determine the prevalence and epidemiological parameters related to *Pediculus capitis* infestation among 1402 pupils from 3 elementary schools. The finding revealed that 224 samples had *Pediculus humanus capitis* infestation, corresponding to a 15.98% widespread infestation rate.^[15] A similar study determined how often 95,153 school pupils in rural and urban areas had *Pediculus capitis* infestations. Overall, there was a substantial difference in the prevalence of *Pediculus capitis* infestation between rural (1.59%) and urban (0.48%) schools. The findings show that pediculosis capitis is still an issue in various contexts.^[16]

The frequency of headlice infestation was investigated in this study. 300 kids that attended OPD for two months made up the sample. 30% of children aged 6 to 8 and 16% aged 10 were infested. The finding shows a significant head lice infestation.^[17]

Neem oil was used in the research study to treat lice. Neem preparations are now employed worldwide to combat migrating locusts and other insect pests because of their toxicological safety, low manufacturing cost, favourable ecotoxicological qualities, and ease of tree production (*Azadirachta indica*) in tropical climates.^[18]

The antibacterial exertion of Karanj and Neem seed oil painting in vitro was estimated in an analogous study against 14 types of dangerous bacteria. The pathogens were set up to be inhibited by Karanj and Neem canvases

at 500 microl/ml, 14.28 and 71.42 at 125 microl/ml, and 28.57 and 7.14 at 250 microl/ml, independently, using the tube dilution fashion. Both canvases have bactericidal action that was innocent by heat or energy.^[19]

Neem oil, according to Medic Magic, is a vegetable oil made from the seeds of the evergreen tree *A. indica*. Neem oil often has a light to dark brown color, a bitter flavor, and a potent odour claimed to the flavours of garlic and peanuts. It mostly consists of triglycerides and contains sizable amounts of bitter triterpenoid chemicals.^[20]

Another study examined the effectiveness of neem seed extract shampoo in treating head lice in 60 naturally-infested kids. The study aimed to evaluate effectiveness throughout three different periods (10,15 and 30 minutes). Shampoo should be thoroughly applied to wet hair and massaged into the scalp's surface. The results indicate that the shampoo containing neem seed extract successfully treated headlice at all stages. The exposure times of 10, 15, and 30 minutes showed no differences.^[21]

CONCLUSIONS

The study is useful for finding the overall impact of video-assisted teaching programmes to prevent *Pediculus* through natural remedies among mothers of school children. After VATP was administered, significant variation between the knowledge scores of mothers on the pre-test and post-test was discovered.

Thus, research demonstrated that VATP will very helpful in enhancing mothers' aware of the natural remedies and prevention of *Pediculus*.

CONTRIBUTION OF AUTHORS

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Supervision: Daneshwari H

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