

ORIGINAL RESEARCH ARTICLE

An Interventional Study to Assess the Effectiveness of Video Assisted Teaching Programme in Preventive Education on *PamaKushta* (Scabies)

Author: KhushbuTT¹

Co Authors: Sheethal Dinesh Lende²

^{1,2}Department of Swasthavritta and Yoga, Alva's Ayurveda Medical College and Hospital, Vidyagiri, Moodubidire, Dakshina Kannada (Dist), Karnataka, India

ABSTRACT

BACKGROUND: *Pama Kushta* is one among the *Kshudra Kushta*, caused by vitiation of *Pitta* and *Kapha* *Doshas*. Based on the signs and symptoms, *Pama Kushta* can be correlated to Scabies in modern science. It is an intensely pruritic skin infestation caused by the mite *Sarcoptes scabiei var hominis*. Skin related epidemics are the causes of 14% of all contagious diseases in India. Among all contagious skin diseases Scabies accounts for 28%. Scabies can cause secondary infections and other complications including severe systemic illness if it is left untreated. Lack of awareness regarding the contagious nature of the disease as well as poor educational background contributes towards the prevalence of Scabies.

A video assisted teaching programme is a planned teaching material of lecture combined with video which is imparted to the study group includes the concept in detail. The study has aimed at creating an awareness regarding *Pama Kushta* (Scabies) among the parents of children suffering from the disease and providing knowledge regarding Primary as well as Secondary prevention in order to prevent the occurrence of disease in vulnerable category and to prevent the complications in diagnosed cases respectively.

OBJECTIVES OF THE STUDY

To assess the knowledge of parents regarding the prevention of *Pama Kushta* (Scabies) in children by a pre test.

To assess the effectiveness of video assisted teaching programme on prevention of *Pama Kushta* (Scabies) in children among Parents by comparing the pre test and post test knowledge.

METHODOLOGY: A video assisted teaching programme was conducted after selecting 100 parents of children who were suffering from *Pama Kushta* (Scabies) and the knowledge regarding the disease as well as its prevention were analysed by using a structured pre-test and post-test questionnaire before and after the programme. The results were analysed by using descriptive statistical test and conclusion were drawn.

RESULTS: The overall knowledge regarding *Pama Kushta* (Scabies) among parents of children suffering from the disease got increased from 26.7% to 84.9% after the video assisted teaching programme.

CONCLUSION: The video assisted teaching programme was successfully imparted to the study group, helped to increase the knowledge level regarding *Pama Kushta* (scabies) and its preventive aspects.

Key Words Scabies, *Pama Kushta*, Primary prevention, secondary prevention, Video assisted teaching programme

Received 16th September 21 Accepted 05th October 21 Published 10th November 2021

ORIGINAL RESEARCH ARTICLE

INTRODUCTION

Pama Kushta is one among the *Kshudra Kushta* which is caused by the vitiation of *Pitta* and *Kapha Doshas*¹. Based on the signs and symptoms, *Pama Kushta* can be correlated to Scabies in modern science. It is an intensely pruritic skin infestation caused by the mite *Sarcoptes scabiei var hominis*². Prevalence is more among school children and the disease spread quiet rapidly among children especially in the rural areas due to their close contacts and overcrowding within the schools. Poor living conditions and poor educational status of parents can also be a risk factor for the disease³.

Scabies is usually curable. But neglecting the disease can cause secondary infections and other complications including severe systemic illness. The highest rates of infestation occur in tropical climates, especially in communities where overcrowding and poverty coexist, and where there is limited access to treatment. Lack of public awareness and poor educational background contribute towards the prevalence of scabies⁴.

It is highly significant to understand the disease in all perspective and eradicate the disease from the community. Early diagnosis and proper treatment should be the aim for diseased individual to prevent the occurrence of secondary infections and further complications. As the disease is highly contagious, proper care should be given to the people who are in close contact

with the diseased as well through the measures of primary prevention.

The present study has aimed at creating an awareness regarding *Pama Kushta* (Scabies) among the parents of children suffering from the disease and providing knowledge regarding Primary as well as Secondary prevention in order to prevent the occurrence of disease in vulnerable category and to prevent the complications in diagnosed cases respectively.

AIMS AND OBJECTIVES

1. To assess the knowledge of parents regarding the prevention of *Pama Kushta* (Scabies) in children by a pre test.
2. To assess the effectiveness of video assisted teaching programme on prevention of *Pama Kushta* (Scabies) in children among Parents by comparing the pre test and post test knowledge.

MATERIALS AND METHODS

SOURCE OF DATA: Parents of children suffering from *Pama Kushta* (Scabies) from the schools of rural Moodubidire.

SAMPLE SOURCE: Minimum of 100 parents of children who were suffering from *Pama Kushta* (Scabies) was selected from the schools of rural Moodubidire.

METHOD OF COLLECTION OF DATA

After obtaining permission from the concerned authorities the data was collected in three phases.

ORIGINAL RESEARCH ARTICLE

- Phase 1: Students with *Pama Kushta* (Scabies) were diagnosed by using a structured case proforma.

- Phase 2: The informed consent was obtained from the parents. The pre-test knowledge regarding *Pama Kushta* (Scabies) was assessed by using the structured questionnaire. On the same day Video Assisted Teaching Programme was conducted.

- Phase 3: The same questionnaire was administered after 15 days to assess the Post- test knowledge regarding *Pama Kushta* (Scabies) after video assisted teaching programme.

SAMPLE TECHNIQUE: Purposive sampling technique

INCLUSION CRITERIA

- Parents of children, who were diagnosed with *Pama Kushta* (Scabies) between the age group of 5- 15 years irrespective of gender from the schools of rural Moodubidire.

- Parents with children of either sex, between the age group of 5- 15 years diagnosed as *Pama Kushta* (Scabies) in schools of Rural Moodubidire.

EXCLUSION CRITERIA

- Parents who were not willing to participate in the study.
- Parents who were not available at the time of study.

ASSESSMENT CRITERIA

- The structured case proforma for the diagnosis of *Pama Kushta* (Scabies) for children.
- Consent form from the parents.

- The structured questionnaire for the knowledge assessment in parents regarding *Pama Kushta* (Scabies).

The structured questionnaire included a set of thirty questions with four sections.

Section 1: Practice of *Apathya Ahara Viharas*. A set of 10 questions were included for assessing the practice of *Apathya Ahara Viharas* by children.

Section 2: Knowledge regarding symptoms. A set of six questions were included for assessing the knowledge regarding symptoms of the disease.

Section 3: Knowledge regarding complications. One question with its sub question was included for assessing the knowledge regarding complication of the disease.

Section 4: Knowledge regarding prevention. A set of thirteen questions were included for assessing the knowledge regarding prevention of the disease.

In total, a set of thirty questions, both English and Kannada Language, including sub questions were designed for the assessment of knowledge regarding *Pama Kushta* (Scabies). The same structured questionnaire was used for both pre-test and post-test for the assessment.

DIAGNOSTIC CRITERIA

- Diagnosis was based on the *Lakshanas* of *Pama Kushta* (Scabies) mentioned in the classics.
- IACS criteria for the diagnosis of Scabies.

STUDY DESIGN

Pre and Post test design.

ORIGINAL RESEARCH ARTICLE

The detailed video regarding *Pama Kushta* (Scabies) was prepared which includes;

- Its causative factors
- Common sites
- Clinical features
- Factors contributing towards the prevalence of scabies.
- Types of scabies
- Mode of transmission
- Complications
- Preventive and control measures.

SETTING OF THE STUDY

The study was conducted during January 2021 to March 2021 after selecting schools randomly from the list of schools given by the Block Education Office, Moodubidire. Minimum 100 children suffering from *Pama Kushta* (Scabies) were selected by Purposive sampling technique and diagnosed using a structured case proforma from the schools of rural Moodubidire.

The details regarding parents of children suffering from *Pama Kushta* (Scabies) were obtained from the school management. They were informed about the video assisted teaching programme by the school management and convenient date was fixed for the programme. On the day of programme, consent form from the parents was obtained initially. The knowledge regarding *Pama Kushta* (Scabies) was assessed by using a structured questionnaire as a pre-test. After that, the video assisted teaching programme was conducted which included all the information regarding *Pama Kushta* as well as Scabies.

The causative factors, symptoms, complications, mode of transmission, treatment, prevention as well as control measures along with its *Pathya* and *Apathya Ahara Viharas* were included in the video with its Ayurvedic as well as modern point of view. After the video section, an interactive section was conducted and the queries of parents regarding the disease and its prevention were clarified. After fifteen days, next section was conducted. The same questionnaires were given to the parents as a post-test and the data was collected. The condition of children suffering from *Pama Kushta* (Scabies) was analysed. The obtained data were analysed using descriptive statistical test and conclusion was drawn.

RESULTS AND DISCUSSION

Observation based on student's demographical data and case proforma

The following observations were obtained during the study.

Distribution based on Age

Out of 100 students, 5(5%) were of 10 years of age, 19 (19%) were of 11 years of age, 18 (18%) were of 12 years of age, 20 (20%) were of 13 years of age, 21 (21%) were of 14 years of age and 17 (17%) were of 15 years of age.

Distribution based on the presenting complaints:

Distribution based on Kandū: Out of 100 students, 91 (91%) were having *Kandū*.

ORIGINAL RESEARCH ARTICLE

Distribution based on Daha: Out of 100 students, 40 (40%) were having *Daha* (Burning sensation).

Distribution based on Srava: Out of 100 students, 37 (37%) were having *Srava* (Discharge from the rash).

Distribution based on Varna of Pidaka: Out of 100 students, 35 (35%) were having *Shweta Varna Pidaka*, 4 (4%) were having *Shyava Varna Pidaka* and remaining 61 (61%) were having *Aruna Varna Pidaka*.

Distribution based on Family history

Out of 100 students, 70 (70%) were having the same complaints in their family.

Distribution based on sleep

Out of 100 students, 71(71%) were having disturbed sleep.

Distribution based on the presence of burrows

Out of 100 students, 59 (59%) were having visible burrows in the affected sites.

Distribution based on the types of lesions

Out of 100 students, 52 (52%) were having Papular lesions, 33 (33%) were having vesicular lesions, 6 (6%) were having pustules and 9 (9%) were having nodular lesions.

Distribution based on the demographic data of parents

Table 1 Overall practice of Apathya Ahara Viharas by children

<i>Apathya Ahara Vihara Sevana</i>	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Intake of curd	41	41%	26	26%
Intake of sesame	23	23%	16	16%
Intake of black gram	46	46%	24	24%
Suppression of urine	34	34%	18	18%
Suppression of faeces	21	21%	13	13%
Suppression of vomiting	8	8%	4	4%

Distribution based on Education

Out of 100, maximum (49%) were having Secondary Education, 31% were having Primary Education, 14% were having Higher Secondary Education, 4% were Graduates and 2% were Post Graduates.

Distribution based on Socio-economic status

Out of 100 subjects, 0 (0%) were Upper class family, 7 (7%) were Upper Middle class family, 41 (41%) were Lower Middle class family, 43 (43%) were Upper Lower class family and 9 (9%) were Lower class family.

Distribution based on Location

Out of 100 subjects, 100 (100%) were belonging to Rural area.

Distribution based on Family

Out of 100 subjects, 63 (63%) were belonging to extended family and 37 (37%) were belonging to nuclear family.

RESULTS

The overall knowledge regarding *Pama Kushta* (Scabies) was 26.7% when the pre- test was conducted. In the post-test the percentage of overall knowledge among the parents became 84.9%. There was 58.2% of difference in overall knowledge regarding *Pama Kushta* (Scabies) after the video assisted teaching programme.

ORIGINAL RESEARCH ARTICLE

Intake of cold water after exposure to hot sun	47	47%	23	23%
Intake of cold water after exercise	59	59%	31	31%
Sour and salty foods	60	60%	34	34%
Meat and milk	41	41%	21	21%
Sleep during day time	13	13%	7	7%
Total	393	35.72%	217	19.72%

Table No.1 shows that when the pre-test was conducted, the overall percentage of children who were following *Apathya Ahara Viharas* was

35.72%. In the post-test which was conducted after the video assisted teaching programme the percentage level got reduced to 19.72%.

Table 2 Overall knowledge regarding the symptoms

Symptoms	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Commonly affected sites	16	16%	79	79%
Time of aggravation of itching	43	43%	81	81%
Nature of the lesion	6	6%	81	81%
Colour of lesion	29	29%	85	85%
Total	94	23.50%	326	81.50%

Table No.2 shows that, the overall percentage of parents who were aware regarding the symptoms of the disease was 23.50% when the pre-test was

conducted. In the post-test which was conducted after the video assisted teaching programme the percentage level got increased into 81.50%.

Table 3 Overall knowledge regarding complications

Awareness about complications	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
	7	7%	83	83%

Table No.3 shows that, the overall percentage of parents who were aware regarding the complications of the disease was 7% in the pre-

test. The knowledge level got increased into 83% in the post-test which was conducted after the video assisted teaching programme.

Table 4 Overall knowledge regarding prevention

Prevention	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Prevention is better than cure	79	79%	100	100%
Regular practice of hand washing	79	79%	94	94%
Trimming of nails regularly	74	74%	100	100%
Awareness about treatment	12	12%	79	79%
Awareness about secondary infection	4	4%	78	78%
Total	248	49.6%	451	90.2%

Table No.4 shows that in the pre-test, the overall percentage of parents who were aware regarding the prevention of disease was 49.60%. It became 90.20% in the post-test which was conducted after the video assisted teaching programme.

DISCUSSION

Discussion on the result of practice of Apathya Ahara Viharas

ORIGINAL RESEARCH ARTICLE

When the pre- test was conducted 35.72% of students were following *Apathya Ahara Viharas* which might be an aggravating factor for the disease. In the post- test which was conducted after the video assisted teaching programme the percentage level who were following such *Apathya Ahara Viharas* got reduced into 19.72%. This indicates that after the programme they became more conscious about *Apathya Ahara Viharas* of the disease and reduce following such foods and activities.

The structured video explains about *Apathya Ahara Viharas* such as *Ksheera, Dadhi, Matsya, Mamsa, Tila, Vega Dharana, Divaswapna* etc helped to improve the knowledge among the parents. Hence the video assisted teaching programme was beneficial for them.

Discussion on the result of knowledge regarding symptoms

In this study out of 100 subjects 23.5% were having knowledge regarding symptoms of the disease when pre- test was conducted. In the post- test which was conducted after the video assisted teaching programme it became 81.5%. This indicates through the video assisted teaching programme symptoms of the disease were understood by maximum number of subjects.

Discussion on the result of knowledge regarding complications

In this study only 7% were having knowledge regarding the complications of *Pama Kushta* (scabies) when the pre-test was conducted. After the video assisted teaching programme the knowledge level got increased into 83%. This

indicates maximum number of subjects gained knowledge after the programme.

Discussion on the result of knowledge regarding the prevention

In this study when the pre-test was conducted 49.6% were having knowledge regarding the preventive aspects of *Pama Kushta* (scabies) and it became 90.2% in the post-test which was conducted after the video assisted teaching programme.

The overall knowledge level among the parents of children suffering from *Pama Kushta* (scabies) about the preventive aspects got increased after the video assisted teaching programme.

The initial lack of knowledge might be due to their poor educational status as well as poor quality of life. Hence the study conducted was effective in improving the knowledge regarding *Pama Kushta* (Scabies) among the parents of children suffering from *Pama Kushta* (Scabies).

CONCLUSION

Parents of 100 students who were diagnosed with *Pama Kushta* (scabies) in the schools of rural Moodubidire were taken in this study. They were interviewed by a structured Pre-test and post-test questionnaires on the basis of Video Assisted Teaching Programme and knowledge level regarding the disease as well as its preventive aspects has analysed. The overall knowledge among the parents of children suffering from *Pama Kushta* (Scabies) got increased after the video assisted teaching programme.

ORIGINAL RESEARCH ARTICLE

Hence, the study has successfully imparted the knowledge in terms of primary prevention to the vulnerable category to prevent occurrence of the disease and secondary prevention for diagnosed cases to prevent the complications and secondary infections.

ORIGINAL RESEARCH ARTICLE

REFERENCES

1. Agnivesha, Charaka samhita, Chakrapanidatta commentary Ed R. K Sharma, Bhagawandash, Chaukhambha Sanskrit series, Varanasi, 1998, Chikitsa Sthana, Kushta Chikitsa, verses no 30, pp 326.
2. Venkataram, S. Sachidanand, K. H Sathyanarayana Rao, Text book of Dermatological disease – A practical approach, B I Publication, Pvt Ltd, pp 199 - 200.
3. J S Pasricha, Ramji Gupta, Illustrated Text book of Dermatology, Jay Pee Brothers Medical Publishers (P) Limited, 3rd Edition, pp 67.
4. <https://www.who.int/news-room/fact-sheets/detail/scabies>.