

A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING TOMATO FEVER IN CHILDREN AMONG PARENTS IN SELECTED AREA OF PUNE CITY

Mrs. Sneha Sankpal-Desai^{1*}, Mr. Ashish Pathak², Miss. Vaishnavi Badade², Miss. Priyanka Chandane², Mr. Aditya Chougule², Miss. Nikita Dighe²

1. M.Sc (N), Clinical Instructor, Bharati Vidyapeeth (Deemed to be University) College of Nursing, Dhankawadi Pune.
2. BSC Nursing Student, Bharati Vidyapeeth (Deemed to be University) College of Nursing, Dhankawadi Pune.

*Corresponding Author

ABSTRACT

Tomato fever is caused by coxsackievirus A-6 and A-16. Infection with this virus can cause some neurological symptoms. Fever is a common symptom associated with infections in childhood and about 60% of children experience fever three to six times in a year during their first five years of age. (Hay, et al., 2005). Tomato Flu is trending in India around 82 cases of Tomato Flu have been reported in India since May 2022 reveals a Lancet study.⁵ **Aim of the study:** to assess the effectiveness of information booklet on knowledge regarding Tomato fever in children among parents in selected area of Pune city." to find association between selected demographic variables. **Material and methods:** The quantitative research approach was used for this study. The sample size was 200. It included parents selected areas of Pune City. The self-structured questionnaire tools used to collect data and information booklet regarding tomato fever is given to the parents after the pre-test. The tool was evaluated and validated by 9 experts. The questionnaire consists of 21 items and in 21 questions are in multiple type of questions and 8 are yes/no type question. In section Ist Demographic section and in section IInd multiple choice question. Pre and Post test is done on parents in selected areas of Pune city. **Result-**before intervention majority of 88% having average knowledge regarding tomato fever, 9.5% have good knowledge & 2.5% having poor knowledge regarding tomato fever and after intervention majority of 55.5% having average knowledge regarding tomato fever, 44.5% having good knowledge regarding tomato fever. Age, Socio-economic status, education of parents, & occupation of parents are found significantly associated with knowledge at the level of 0.05. **Conclusion-** The results indicated that majority of parents knowledge improved after intervention and it shows that the information booklet was effective.

KEYWORDS:- Assess, Effectiveness, Information Booklet, Tomato Fever

INTRODUCTION

Tomato fever is caused by coxsackievirus A-6 and A-16. Infection with this virus can cause some neurological symptoms. Encephalitis (brain infection) can also occur. In 99.9% of cases, the disease resolves on its own. In some cases, it can cause central nervous system problems. Tomato rash usually occurs on the tongue, gums, inside of the cheeks, palms and soles. According to experts, the monkey pox rash is deeper. The spread of the rash on the body is also different¹.

Tomato flu is a contagious disease usually spreads among young children from age one to nine. It mainly causes rashes, skin irritation, high-grade fever, dehydration, and blisters on the body. The blister appears red, round, and fluid-filled like a tomato. This is why they call it tomato fever. The exact cause of tomato fever is still under debate, although doctors believe it is a viral infection. Children under five are the most commonly affected. Hence it may spread fast among small clusters centred on child care centre and primary schools². Tomato fever is not a dangerous disease, although the symptoms can be particularly problematic for young children. Usually, the symptoms resolve in ten days. The illness is rare in adults due to the strong immune system that aids in defending against the virus³.

Tomato Fever (Tomato Flu), a virus infection has emerged in India in the state of Kerala in children younger than 5 years of age. It was first identified in the Kollam district on May 6, 2022. The name "tomato fever" is suggested due to the blisters shape, size, and color. To be precise, the blister mimics the red tomatoes and hence got the name. It also causes red coloured rashes all over the body. However, studies show that children are more affected by this disease than adults⁴.

NEED OF THE STUDY

In Tomato fever having symptoms such as vomiting, fever, small red spots appears which changes into blisters and then to ulcers, skin irritation so people are unaware about this disease and that's why there is increase in mortality.

It is seen that children in the age group of 1–9 years are mostly affected by the outbreak. Though children as old as 9 years have been affected, it is reported that the virus is mostly seen in children under-5 years. An However, the increasing cases of tomato flu have now become a concern as it is found to affect more children under five than usual⁵. According to experts, young children are most vulnerable to this illness because their immune systems are underdeveloped, making them more prone to becoming infected, but it does not easily pass on to adults. Another possible factor contributing to the increase in infection among young children is the reopening of schools following their closure during the COVID-19 pandemic. It is seen that children in the age group of 1–9 years are mostly affected by the outbreak. Though children as old as 9 years have been affected, it is reported that the virus is mostly seen in children under-5 years⁶.

Tomato flu infection is believed to be a variant of the viral hand-foot-and-mouth disease (HFMD), a common condition primarily affecting children aged 1–5 years Tomato fever is the new condition which is occurred in Kerala so there is chances to spread of tomato fever every were so researcher feel that knowledge should be checked regarding Tomato fever at Pune and also knowledge should be provide for prevention of disease and promotion of health. Health professionals are worried about Hand Foot Mouth Diseases, often also known tomato fever since it is spreading so quickly among children⁷.

AIM OF THE STUDY

To assess the effectiveness of information booklet on knowledge regarding tomato fever in children among parents in selected areas of Pune city.

MATERIAL AND METHOD

Research approach in order to achieve the desired objectives of this study, quantitative research was adopted. Research design Quasi experimental exploratory research design. Setting of the

study was at selected Areas of Pune city (Balaji Nagar, Dhankawadi, DattaNagar). The population of the present study was parents in selected areas of Pune city. The sample selected for data collection were those who fulfilled the criteria laid down for the selection of the sample and were available during the period of the data collection. The sample technique adopted was non-probability sampling purposive sampling.

Inclusion Criteria : - Parents who are willing to participate. Parents who know Marathi and English language.

SECTION 1 – Deals with the demographic data such as code number, age , gender, education, job, co- morbidities.

SECTION 2 – Self Structured questionnaire

Validity: To ensure content validity tool was submitted to 9 expert from medical surgical nursing department, As value of n is 20 the test was reliable. After the pilot study, main study was found to be feasible.

RESULT

Demographic profile of parents

The study showed that 82% participants were in 31 - 35 years .Majority of 57% participants were female and 54% participants were mother. Majority of 84% participants were middle class family. Findings showed that 39.5% participants were having Secondary education and 47% participants were employed.

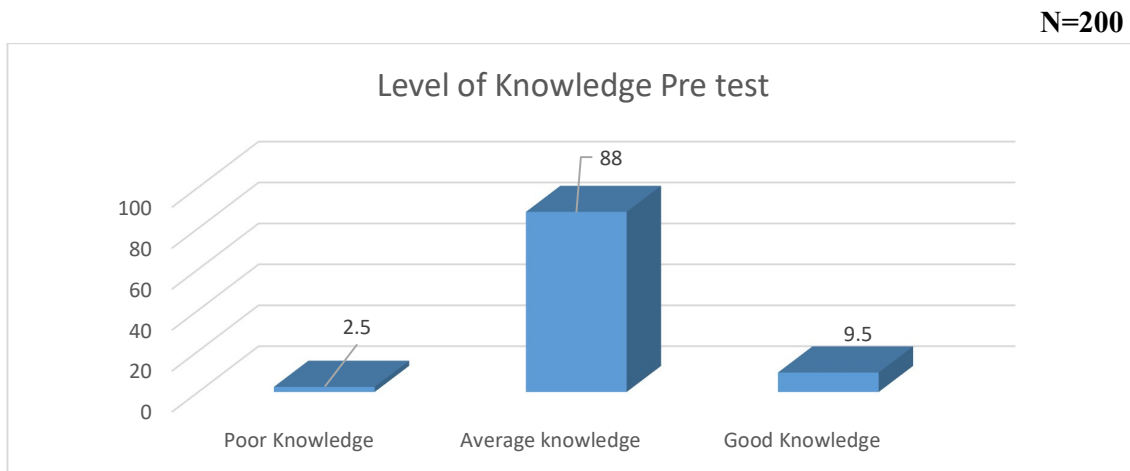


Figure 1. Level of knowledge regarding tomato Fever in children among parents before Intervention.

Above shows that before intervention 88% parents having average knowledge, 9.5% having good knowledge & 2.5 % having poor knowledge regarding tomato Fever among parents.

N=200

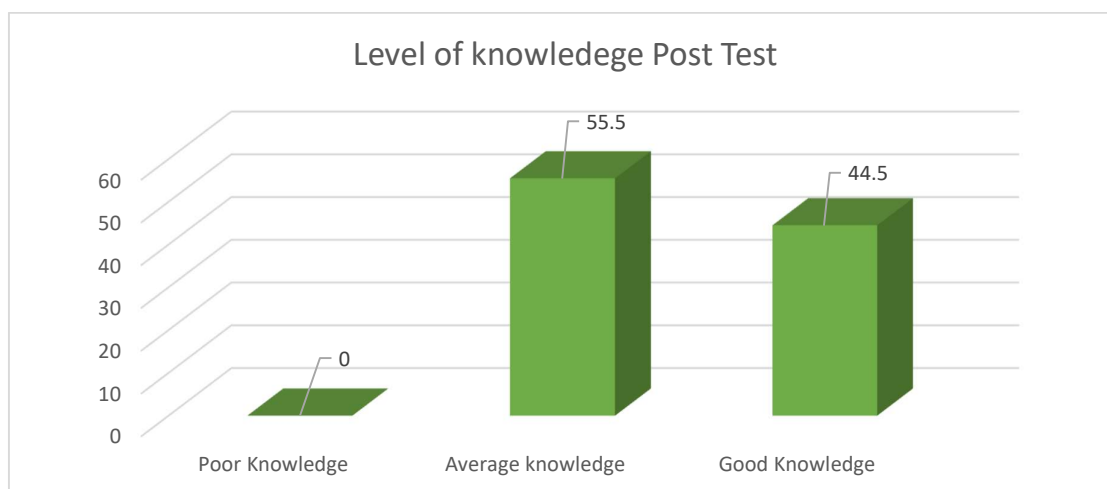


Figure 2 level of knowledge regarding tomato Fever in children among parents after intervention in group.

Above shows that after the intervention majority of 55.5% having average knowledge and 44.5 % having good knowledge regarding tomato Fever among parents.

Table 1- Compare the level of knowledge before and after intervention. N=200

knowledge	Poor	Average	Good	Mean	SD
Pertest	5	176	19	11.24	2.22873
Post test	0	111	89	14.78	2.33
Comparison				3.5	0.11

Above table showed that comparison of pre and post intervention that the pre intervention mean score was 11.24 with SD 2.22 that was increased after the intervention which was 14.78 with SD 2.33.

Table 2- Effectiveness of information booklet regarding tomato fever among parents after intervention. N=200

Effectiveness Knowledge	Mean	Sd	t value	p value	Remark
Pre test	11.24	2.22	25.79	<.0001	Significant
Post test	14.8	2.37			

INTERPRETATION:

The computed paired t-test statistic value is 25.79. The p-value was <0.0001, which is small (less than 0.05), and the null hypothesis is rejected. It shows that the information booklet was effective.

Finding related to association of knowledge with selected demographic variables.

The study shows that Age, Socio-economic status, education of parents, & occupation of parents are found significantly associated with knowledge at 0.05 level of significance. Gender & parents are not significantly associated with knowledge at 0.05 level of significance.

DISCUSSION

This study can be discussed with Anirudha Vijay Mutalik et al knowledge, attitude, and practice about acute respiratory infections among school going children⁸. A restructured and pretested questionnaires were used to assess the KAP of children's at school and their mothers

at home. A scoring system was developed and was compared among children's and their mothers. Pre test and post test was done on children mother in selected areas of Pune city. More than half of parents had average knowledge, but attitude and practice Findings showed that 82% participants were in 31 - 35 years and 64% participants were 25 – 30 years respectively and 39% were from 36 – 40 years and 15% were from 41 – 45 years. Majority of 57 % participants were female and 43 % were male. 54 % participants were mother and 43 % were father and 3% were caretaker. 84% participants were middle class ,10% were having high class and 6% were Low class. Findings showed that 39.5% participants were having Secondary education, 28 % were having primary education, 25.5 % were having graduate and 7 % were having No formal education. Majority of 47% participants were Employed, 15 % were Unemployed , 30.5% were having Business & 7.5 % were farmers.

Data presented in Table 2 shows that before the intervention majority of 88% having average knowledge regarding tomato Fever, 9.5% have good knowledge & 2.5 % having poor knowledge regarding tomato Fever. regarding diarrheal diseases were found very poor. Overall, KAP score was also between poor and average whereas mothers were having very poor KAP about acute respiratory infection. A major determinant of child health is the health and knowledge of the child's mother. Hence by improving the knowledge, attitude and health practices of the mothers regarding acute respiratory illness directly reflects on the health and vitality of the child.

CONCLUSION

A statistically there is significant association was found between the level of knowledge among parents regarding tomato fever. Although the parents were having average knowledge regarding topic before giving information booklet in pre test. After the given information booklet the knowledge regarding tomato fever is increased. More emphasis should be given for health education to create awareness regarding tomato fever & upper respiratory tract infection under five children in the community by the health care professionals⁹. There is no specific treatment for tomato flu. Medicines are given according to symptoms. The guidelines released by the central government for the disease state that infected should be isolated for five to seven days. Others should be taught not to hug or touch a child with this disease. Cleanliness should be maintained. Care should be taken that children do not suck their fingers. It should be prohibited. Tomato fever is the new condition which is occurred in Kerala so there is chances to spread of tomato fever everywhere so researcher feel that knowledge should be checked regarding Tomato fever at Pune and also knowledge should be provide for prevention of disease ,promotion of health.¹⁰ It shows that the information booklet was effective.

CONFLICT OF INTEREST

The authors certify that they have no involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this paper.

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