



AN INSIGHT INTO KNOWLEDGE, ATTITUDE AND PRACTICES OF PARENTS TO CONTROL SCRUB TYPHUS IN CHILDREN ATTENDING A TERTIARY CARE HOSPITAL

Tropical Medicine

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ABSTRACT

Background: Scrub typhus, an underestimated disease in children presented as an acute undifferentiated febrile illness with a complicated course. **Objective:** to determine the knowledge of scrub typhus among parents, their attitude and practices to control the vector transmission. **Methods:** A cross sectional study was conducted in a tertiary care hospital, in Rourkela from 15 to 17 of 2023. **Result:** Out of 398 sample size population, 53.8% people heard of scrub typhus. There was significant difference of knowledge (p-0.001) and attitude (p -0.012) among the people who heard or not heard of scrub typhus. Among people heard, 68.2% were males, while the mean (SD) age was 35.52(8.83). Out of people who heard of scrub typhus, 40.2% had moderate knowledge, 89.7% had good attitude, 52.3% had adequate practices. Out of people with moderate (40.2%) to good (25.2%) knowledge about scrub typhus, 76.6% had poor knowledge about tick. People following adequate practices (52.3%), had poor practices specific to tick (84.1%). **Conclusion:** There is huge gap in the parent's knowledge about vector and its preventive measures. So, interventions should be taken to raise awareness among parents to control the transmission of scrub typhus.

KEYWORDS

knowledge, attitude, practices, scrub typhus, underestimated, vector

INTRODUCTION:

Background: Scrub typhus, an underestimated disease in children, presents as an acute, undifferentiated febrile illness with a complicated course.

Objective: The main objective of the study was to determine the knowledge of scrub typhus among parents, their attitudes, and practices to control the vector transmission and to raise the awareness of scrub typhus among parents.

METHODS:

Study Design:

A cross-sectional study was conducted in a tertiary care hospital, in Rourkela from September 15 to 17 of 2023. The study population, consisted of 398 parents of children who attended the pediatric outpatient department with febrile illness lasting for more than 3 days.

Data Sources And Measurement:

Data was collected from a self-administered questionnaire with a total of 33 questions, of which the first question was "Have you heard of scrub typhus?" Those who answered yes were taken as respondents. Questions regarding knowledge (18), attitude (6) and practices (8) were either yes or no types. One score was given for yes and zero for no. An individual score for knowledge, less than 50% (1 – 9 score), 51 – 75% (10 – 13 score), and 76 – 100% (14 – 18 score) were considered poor, moderate, and good, respectively. The scores for good knowledge regarding endemic zones (>50%), tick (>50%), course of disease (75%) and preventive measures (75%) were recorded. An individual score for good attitude and adequate practices was scored as greater than 75% (>4, >6, respectively).

Statistical Methods:

The statistical software SPSS version 24 was used. Categorical variables were expressed as percentage of patients and compared using Pearson's Chi Square test for Independence of Attributes/ Fisher's Exact Test as appropriate. Continuous variables were expressed as Minimum, Maximum, Mean, Median and Standard Deviation and compared using the Mann-Whitney U test since the data does not follow a normal distribution. An alpha level of 5% was taken, i.e., if any p value was less than 0.05, then it was considered as significant.

RESULT:

Descriptive Data:

Among respondents, 68.2% were males, while the mean (SD) age was 35.52 (8.83) with the leading source of information about scrub typhus was verbal (31%) followed by social media (26%) and television (24%). Out of the 398-sample size, 214 (53.8%) subjects heard of scrub typhus. There was a significant difference of knowledge (p value-0.001) and attitude (p value-0.012) among the people who heard or did not hear of scrub typhus. Males had better attitudes than females (p-0.002). Parents who were under 40 years of age were following good practices in comparison to those above 40 years (p-0.008).

Main Result:

Out of parents who heard of scrub typhus, 40.2% had moderate knowledge, and 34.6% with poor knowledge while 89.7% had a good attitude. Only 52.3% had adequate practices to prevent transmission. Out of those parents who knew about scrub typhus, there was good knowledge regarding endemicity and preventive measures (77.6% and 43%), 56.1% had moderate knowledge about disease, 76.6% had poor knowledge about ticks. Parents following adequate practices (52.3%), had poor practices specific to tick comprised 84.1%.

DISCUSSION:

Key Result:

Out of parents who heard of scrub typhus, 34.6% had poor knowledge. There was good knowledge regarding endemicity and preventive measures (77.6% and 43%), but 76.6% had poor knowledge about ticks. Despite 52.3% having adequate general practices, 84.1% had poor tick-specific practices.

Limitations: study size, demographic data, geographical areas.

Interpretation:

There is a huge gap in the parent's knowledge about the vector and its preventive measures. Therefore, it is important to spread information on scrub typhus, its preventive measures, and highlight the risks through communication tools. Further studies should be conducted to assess knowledge, attitudes, and practices regarding scrub typhus in India.

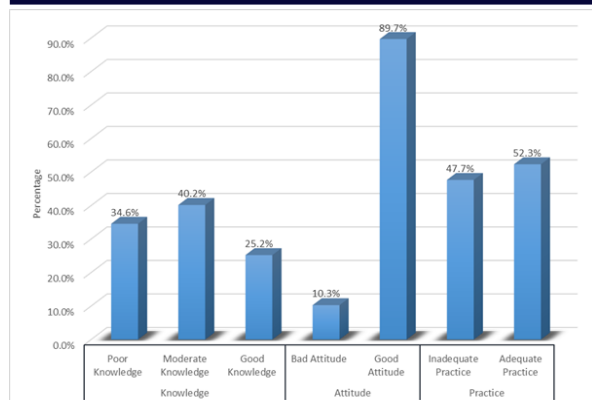


Figure 1: Outcome Percentage of knowledge, attitude and practice.

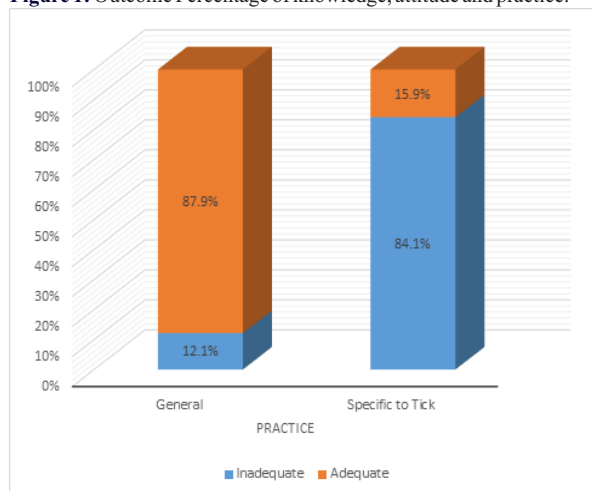


Figure 2: Outcome Percentage of practices.

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