

Case Report**INVESTIGATION AND CONTROL OF SCABIES IN SHELTER HOMES OF MANDYA CITY****Poornima Sadashivaiah¹, Raghini Ranganathan², Vinay M³, Shreedhara Chikkade⁴, Mahendra B J⁵**

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ABSTRACT

Two children with scabies and impetiginisation were admitted to Mandya institute of Medical Sciences (MIMS). Epidemiological investigation revealed that these children were traced to a common childcare facility in Mandya City. Cluster testing of the children from different childcare facilities led to identification of 38 cases of scabies. Blanket treatment was initiated with Lindane lotion and the children were monitored. This outbreak investigation explains how cluster testing led to diagnosing, treatment, control and prevention of scabies in the child care facilities.

Keywords: Scabies, epidemiological investigation, lindane

INTRODUCTION

Scabies has been labelled one of the neglected diseases of the neglected population¹. Scabies is found worldwide and affects people of all races and social classes. Scabies is an infestation of the skin by the human itch mite (*Sarcoptes scabiei*). The most common symptoms of scabies are intense itching (more at the night time) and a pimple-like skin rash. The disease spreads by direct, prolonged, skin-to-skin contact with a person who has scabies. Scabies can spread rapidly under conditions of overcrowding and or where close body and skin contact is frequent. Scabies can cause complications like pyoderma, acute renal failure (ARF), post streptococcal, glomerulonephritis (PSGN), abscess, cellulitis and septicaemia in infants². Scabies does not cause epidemiological emergencies, but the disease impacts the quality of life and impose financial burden on the families and the community. Institutions such as orphanages, military battalions, child-care facilities, prisons etc are often sites of scabies outbreaks.

Two children aged 7 and 9 years, presented to the Pediatrics outpatient department with fever and blisters over both the hands. They had papular lesions over the web spaces and extensor aspects of both knees associated with intense itching, aggravated in the night. They were diagnosed to

be having Scabies with secondary impetiginisation. History revealed that they were sisters and that they lived in a childcare facility in the city. Both the children were admitted and treated with lindane lotion and parenteral antibiotics. The department of Community medicine was notified about the cases of scabies.

A health team consisting of an Epidemiologist, the Medical officer of the concerned Primary health Centre, the ANM of the PHC, post graduate students and house surgeons of MIMS, Mandya was formed. The health team visited the child care facility for girls. It had 29 inmates aged 3 to 16 years. Only 3 children were found at the child care facility. The other 26 children attended a school nearby. The health team appraised the school authorities about the investigation following which children hailing from the girls' childcare facility were gathered and screened for scabies.

RESULTS

7 children out of the 26 girl screened at the school had scabies. The school teachers' reported similar looking lesions among the boys studying in the school. It was found that these boys resided at a boys' childcare facility and a government boys' hostel. Out of the 32 children residing at the government boys' childcare facility 21 children

tested positive for scabies. It was observed that, of the 90 children residing at the government boys' hostel only children aged 10-12 years had scabies. These children lived in a dormitory and were not

provided with individual towels or blankets unlike the older children. Hence, it was decided to treat the children aged 10-12 year.

Table 1: Proportion of inmates screened and proportion of children positive for scabies

Name of the shelter home	Number of children		
	Residing	Screened (%)*	Positive for Scabies (%)*
Government Girls' child care facility	29	27#(93.10)	7(24.13)
Government Boys' child care facility	32	32(100.00)	21(65.62)
Government hostel for Boys	90	90(100.00)	10(11.11)

*Figures in parentheses indicate percentage of the total inmates; #2 children were admitted in the hospital and were under treatment for scabies

Blanket treatment was planned for all the children residing in the child care facilities. Drugs required for blanket treatment were procured with the coordinated support of the Medical superintendent of MIMS and the District health office. The children were treated with 1% topical lindane lotion and Tab. Chlorpheniramine 4mg twice daily for three days. The blanket treatment of the children was synchronized with washing, sun drying and ironing of the children's clothes, towels, linen, blankets, pillow covers and school bags. The children were closely monitored for response to the scabicide. The children, their caretakers and supervisors were educated on the measures to be taken to prevent recurrence. The wardens of the child care facilities were made responsible for the personal hygiene of the children. Since previous history of deworming was available they were dewormed with Tab. Albendazole 400 mg stat dose and the opportunity was used to treat them with Tab. Ferrous Sulphate one tablet OD for three months. Monthly visits by the health team have been planned to supervise and reinforce the maintenance of personal hygiene of the children.



DISCUSSION

Scabies is one of the common skin condition. There are not many community based studies which estimate the prevalence of Scabies. However, the percentage of people attending

dermatology clinic who have Scabies has been estimated to vary between 7.7% and 14.2%^{3,4}.

There are few studies that question the role of poor hygiene in the transmission of Scabies, contrary to the conventional belief^{5,6}. In our investigation scenario, improvement in personal hygiene coupled with treatment and health education has prevented recurrence of Scabies up to 3 months after the intervention.

CONCLUSION

Cluster testing of children from a common shelter facility, led to identification of previously undiagnosed cases of scabies, appropriate treatment and prevention of further spread of the disease.

Acknowledgements: The Director (MIMS), The Medical Superintendent (MIMS), The District Health Officer, Staff of the department of Community Medicine and PHC, Kyathamgere.

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