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ENTEROBIOUS VERMICULARIS INFECTION AMONG PRIMARY SCHOOL CHILDREN IN SLUM AREA IN DISTRICT REWA (M.P.) INDIA

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ABSTRACT

The Present investigation was carried out in four slum area of Rewa city. The study was conducted between the months of February 2011 to June 2011.The total number of 160 primary school children selected for the study, residing in these slum areas. Examination of *Enterobias vermicularis* was carried out by scotch tape perianal examination, floatation, and egg counting technique. The infection rate calculated to be 46.87 %. It is reported that *Enterobias vermicularis* infection are more common in the children staying in slum areas it is due to unhealthy sanitation, lack of awareness of cleanness and poor quality of water available for internal and external use, and improper health education.

INTRODUCTION

Enterobious vermicularis is the common helminthes parasite; it lives in gastrointestinal tract. The common name of this parasite is “pin worm” and popular name is “chunna” in Rewa region. This parasite is acquired by ingestion of embryonated eggs or by inhalation of dust contaminated with eggs. Female laid her eggs in perianal regions and causes pruritus vulvovaginatis. Enterobiasis is linked to lack of sanitation, lack of hygiene, lack of access to safe drinking water, improper hand wash after defecation; Enterobiasis occurs where there is illiteracy, unawareness, and low socio-economic status of families. This infection affects both general health and intellectual development of children.[1] The objective of present study was to estimate the burden of *Enterobious vermicularis* infection in primary school going children in different Slum area of District Rewa (M.P.) India.

MATERIALS AND METHODS

The present study was done in four slum areas of District Rewa. They were selected on the basis of source of drinking water, sanitation facilities, drainage System etc. The study was conducted between the months February 2011 to June 2011. 160 children were selected for the study. After an informed consent a detailed proforma was filled for each recruited case; a portion of morning stool sample was collected in a wide mouth container along with a little portion of anal swab. Specimens were carefully collected without any contamination, and were carried to laboratory for examination. The specimens were examined by floatation, and egg counting techniques, staining identification was done under light microscope, and cellophane tape method was used.

RESULTS AND DISCUSSION

Enterobius vermicularis is an important gastrointestinal parasite among children; it is more prevalent in developing countries, where unsatisfactory sanitation, hygiene, improper drainage system, contaminated drinking water occurs. All 160 primary school children were examined. 75 were found to be positive for Enterobiasis (age range between 3-8), 43 boys and 32 girls were positive out of 75 positive cases. The overall infection was 46.87 %. (Table-1)

The prevalence of Enterobiasis is common in the world , a study was conducted in Nigeria in the year 2000[2] and 1.5 % infection rate was found among school children.[3] In Kashmir *Enterobias vermicularis* infection was 16.80 %.[4] This kind of study was conducted in Malaysia, where *Enterobias vermicularis* infection was 45.38 %.[5, 6] In Korea Lee *et. al.* conducted the study and found 14.8 % infection.[2]

Table 1 - The prevalence of Enterobiasis Primary School Children in Slum Area in District Rewa

Primary School Children	No. Positive (%)	No. Negative (%)	Total
Male	53.75	46.25	80
Female	40	60	80
Total	46.87	53.12	160

CONCLUSION

The result of this study indicates that Enterobiasis among primary school children is a common health problem. Poor sanitation condition, lack of clean drinking water supply and education play important role in establishing in Enterobiasis. This study advocates the use of various deworming schedule periodically in school to cure the children and to break the transmission chain of *Enterobius vermicularis* along with supply of clean drinking water.

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