PREVALENCE OF INTESTINAL HELMINTHIASIS IN A MENTAL HOSPITAL IN SRI LANKA

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Intestinal helminthiasis is a common health problem in developing countries. This can lead to conditions such as malnutrition, iron-deficiency anaemia and malabsorption. If severe, could result in intestinal obstruction. In Sri Lanka it is prevalent in urban, slum communities and in tea plantations. Other places of concern have been institutions like orphanages, schools, refugee camps, mental hospitals and detention centres where overcrowding and poor hygienic conditions prevail. This study therefore, aims to determine the prevalence of intestinal helminthiasis among the inmates of a mental hospital in Sri Lanka.

The study was conducted in the Mental Hospital, Angoda. The sample consisted of 10% of the total population of its inmates. Samples were stratified by duration of stay at the hospital and by the ward. Thus, a representative sample was selected by different ward conditions, sex of the patient and the time spent in the hospital.

Labeled, wide mouthed, plastic bottles were provided to each selected patient to collect their faecal samples. Each sample was divided and added into two containers, one with saline and the other with polyvinyl alcohol (PVA) fixative. Iodine and saline smears were examined for the presence of helminthes in each sample. A faecal concentration technique performed on the samples proved negative. In addition, samples were obtained from each patient with the use of scotch tape for the diagnosis of pinworm infection. Previous history of treatment for any parasitic infestation was obtained, for each patient, from the hospital records.

The scotch tape technique was applied on 102 patients. However, only 68 provided faecal samples for examination. Of the 68 only 4 were positive for soil-transmitted helminths. Of the four, one had roundworm and whipworm infections, two showed only roundworm infection and the fourth one showed positive hookworm infection. Therefore, the prevalence of soil-transmitted helminthiasis was low (5.8%) among these patients. The prevalence of pinworm infection was also low (1.9%). Treatment records revealed that they were not given antihelminthics during their stay in hospital.

The study shows a low prevalence of soil transmitted helminthiasis in the mental hospital, Angoda. This could be attributed to the fact that the hospital maintained clean lavatories for use by the inmates under supervision. It was also observed that the prevalence of pinworm infection was low. The samples for this observation were not collected early in the morning from all the patients. This fact needs to be corrected in the future.